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BY

W. S. TAYLOR

PROFESSOR OF PSYCHOLOGY IN SMITH COLLEGE



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W. S. T.

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MORTON PRINCE
AND ABNORMAL PSYCHOLOGY

MORTON PRINCE AND ABNORMAL PSYCHOLOGY

I

INTRODUCTION

Now that the writings of many investigators in abnormal psychology are receiving the careful attention of students of human nature generally, it might seem unnecessary to attempt a brief exposition and discussion of the psychological theory of an author whose reputation has traveled far and of whose published works one at least is used as a text-book. Yet the present sketch appears as a response to a need.

For it is true that, outside of the small classes that have read and discussed his later views, the great majority of students and workers in psychopathology as well as in general psychology are not familiar with Morton Prince's important modern contributions. Miss Beauchamp, to be sure, has been very widely heard of. Indeed, the strangeness of her case and the dramatic vividness of its portrayal appear to have caught too forcibly the attention of unaccustomed readers. But with nothing so diverting coming further from the same pen,

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while stimulation from new investigators was plentiful, the human tendency to categorize seems to have favored a general impression that the author of *The Dissociation of a Personality*¹ is (1) "a dissociationist," (2) whose views are "not dynamic," but (3) who marks a "significant step in the development of modern psychopathology," and (4) whose findings are still very important in a specific and rarely met type of hysteria called multiple personality—altogether a curiously inadequate picture.

The sketch which follows is based upon Morton Prince's considerable body of writings;² upon observations of students' reactions to his formulations and to other authors' points of view; upon various investigations of functional abnormalities in the light of these views;³ and, especially, upon recent and detailed discussions with Dr. Prince himself.

II

GENERAL CONCEPTION OF THE ORGANISM

WHAT general conception of the organism appears in Morton Prince's studies?

The organism is considered biologically, as an adjustmental system whose doings and purposive strivings are to be understood physiologically so far as possible. Within this organic system there are, certainly, thoughts, feelings, wishes, and often conflicts; but these elements in the total situation are themselves subject to determination, through all the laws of inheritance and environmental influence. These mental factors are, in fact, "functions" of the nervous system; or more fundamentally, the mental factors are identified with the operation of the nervous system.⁴

Yet this does not mean that the so "parallelistic" ideational and affective elements in our life are to be regarded as mere epiphenomena, superficial dependences of a "more real" material substratum. On the contrary, Prince, as a monist metaphysically, has proposed a theory which would make the relationship between "mental" processes and "physical" processes just the other way around. This theory, psychical monism, he regards really as a scientific

hypothesis essential to his conception of the functioning organism. As, however, the statement of this theory is available in the literature,⁵ and as the present study must be limited to the more positivistic aspects of the whole psychological contribution, we may note simply that for Prince's way of thinking the mental activities (the "actuality" of neural processes) are often the most important for descriptive and explanatory purposes. At the same time he agrees that the functioning of the organism would be most effectively (but not more truly) conceived in terms of its neurological workings, if our knowledge permitted, as then our discussions could be more objective—though not more comprehensible in terms of actual experience.

Obviously Prince's conception of the organism involves emphasis upon processes, not upon structures merely. Thus the first lecture in his most important volume, *The Unconscious*, is headed, "Theory of Memory as a Process." The theory is that "if we consider memory as a *process*, and not as specific phases of consciousness, we shall find that it is an essential factor in the mechanisms underlying a large variety of phenomena of normal and abnormal life."⁶ And "when we conceive of memory as a process we have in mind the whole mechanism through the working of which this past experience is *registered, conserved, and reproduced*":⁷ functions which can be understood "only

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on the supposition that . . . the mental experiences of the moment . . . leave something behind, some residuum which is preserved, stored up as it were, and which plays a subsequent part in the process of memory. These phenomena seem to require what may be called a psycho-physiological theory of memory,"⁸ as crystallized in Prince's conception of "neurograms" as "some sort of physiological residua," "brain dispositions,"⁹ "the *form* in which our mental experiences are conserved."

"But it is not until these physical registers are stimulated and the original brain experience is reproduced that we have memory . . . according to whatever theory of parallelism is maintained." This means that in addition to memory being regarded as a "process," the fundamental activity itself is always a response to a stimulus of some kind: while our author does not stress the specific phrase "stimulus and response" throughout his writings, he does imply this conception of impinging stimuli releasing energetic responses through the essentially connecting neurograms, and he refers constantly to the sensitized coördinating nature of the neurograms themselves, thinking of them evidently as the heart of any action pattern. Indeed, as he observes, "looked at from a purely physical point of view, all parts of the brain must be 'sensori-motor.' . . . It is impossible to conceive that at some particular point, the brain processes cease to be 'sensori-motor' and

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become something else. It would be opposed to the doctrine of evolution.”¹⁰ And aside from their becoming organized naturally into functioning systems, “it is possible that, through chemical changes of some kind left in the system of neurons corresponding to an experience, the neurons may become sensitized so as to react again as a whole to a second stimulus applied to one element”¹¹—the process to which Hollingworth has applied the term “redintegration.”¹² Normally, however, such patterns of response as reflexes become compounded into coordinative systems so that the organism reacts integrately, as a unit.¹³

But is there no “drive” or “ultimate urge” for this biological mechanism that Prince has considered? In other words, is there any array of instinctive “sources of energy,” such as McDougall insists upon constantly,¹⁴ or an *élan vital*, or a *libido*? This question, which is indeed integral to the general conception of the organism, is nevertheless so bound up with the general problem of native and acquired traits that it may be considered with this next topic.

III

THE PROBLEM OF URGES

As for "drives," or inherited urges to action, there are many passages in Prince's writings which are clearly reminiscent of McDougall's earlier formulations. "McDougall has made," in our author's opinion, "a great contribution to our knowledge in having made clear that a primary emotion is not only instinctive, but is the central or psychical element in a reflex process consisting, besides, of an ingoing stimulus and an outgoing impulse. The whole process is the *instinct*. It is of course innate, and depends on congenital prearrangements of the nervous system. The central element, the emotion, provides the conative or impulsive force which carries the instinct to fulfilment. It is the motive power, the dynamic agent that executes, that propels the response which follows the stimulus." Further, "every instinct has an aim or end which it strives to fulfil and which alone satisfies it; and it contains in itself the driving force which, as an urge, or impulse, sets into activity the mechanism and carries the instinctive process, unless blocked by some other process, to completion and satisfies the aim of the instinct. . . . Obviously the instincts and other innate

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dispositions have a biological significance, ontogenetically and phylogenetically, in that they serve the preservation of the individual and species and the perpetuation of the latter. And obviously in the drive to satisfy their aims they determine and govern behavior.”¹⁵

This “drive to satisfy their aims,” however, is purely a matter of biological set, mechanical though complex determination; there is no mystical purposiveness or foreknowledge involved. Urge indeed there is; “as a mere fact of observation . . . fear continues so long as escape has not been achieved. But this is different from purpose. . . . The emotion-instincts . . . are serviceable, not purposeful and do not contain foresight. . . . The mechanism by which an instinct becomes serviceable in given situations is a problem in genetics. . . . Foresight is derived from experience. . . . I also do not accept, nor have I ever accepted, the specificity of the stimulus to which the instinct responds. I do not understand how there can be any specific innate stimulus to which fear and anger respond. Anger, for instance, responds to any blocking impulse.”⁴

Yet the list of “emotion-instincts” employed in Prince’s writings follows for the most part McDougall’s inventory; and there is a similar parallel for “compound emotions,” and, at a higher level, for the “self-regarding sentiment” as the complexly devel-

THE PROBLEM OF URGES

oped crowning idea of the self.¹⁶ And thus Prince agrees quite closely with McDougall in observing that in their determination of behavior, "the innate dispositions . . . become modified and controlled by experience. In this way the behavior of the individual becomes adapted to the specific situations of the environment. Necessarily these modifications of the workings of the innate mechanisms by the imposition of experience upon and within them become very complicated, and the problems of instinct and experience thereby evoked have been the object of much study and debate."¹⁷

In other words, again, the clean-cut categories of McDougall are distinctly open to discussion, however pragmatically useful they may be in describing behavior; as when in tabulating the differences between the members of a multiple personality, it is found "convenient to follow, chiefly, McDougall's classification."¹⁸ (The fact that the convenience here conforms to the actual findings in the case in question is, of course, of little significance for the instinct controversy; since those McDougallian components which Prince finds in his cases may be just the patterns which are most commonly developed in every-day life.)

Apart from this degree of tentativeness about listing the instincts, however (a tentativeness from which the emotions are excluded as certainly instinctive),¹⁸ Prince does not seem to question "the

conative function of emotion." On the contrary, "summing up . . . we may say *one of the chief functions of emotion* is to provide the conative force" not only for instincts but for ideas as well. For "everyone knows in a general way . . . that *affects may become linked with ideas*, and that the force derived from this association gives to the ideas intensity and conative influence."¹⁹ This view was no doubt suggested to Prince by the traditional psychological formulations, and especially by his own observations of the place of emotion in strong registration and conservation of experiences; the very real tendency for experiences with a given emotional or affective quality to work together under certain conditions, against "the conflicting conative force of such other emotions as would act in an antagonistic direction"; and the frequently observed tendency of rankling but "repressed" emotional reactions to "break out" with violence.²⁰

That all of these phenomena occur, there can be no question; and with Prince's rather useful first explanation in terms of "the impulsive force of emotion," a number of students would be content. For those who prefer more concrete explanation, however, it should be noted that Prince considers emotion itself as dependent upon the stimulus-response principle. Emotion "cannot be regarded as a 'free, floating' conscious state, or even force, or libido, or energy, that 'attaches' to this or that, but as only

THE PROBLEM OF URGES

one element in an innate instinctive process conditioned by congenital nervous dispositions and pathways." And as such, an "emotional response" can only be released or exploded by a stimulus, "like hitting a percussion cap."²¹ For that matter, *ideas* are probably likewise dynamic in themselves, simply because *all* reactions involve release of energy; though the "drive" of an idea is often reinforced by the energization of emotion.²²

Hence as far as any single or libidinous basis for all human actions is concerned, "like Descartes' soul in the pineal gland," it both "shocks the imagination" and is, to Prince's mind, "untenable. The present-day tendency to find a quasi-philosophic single principle to explain the complex psychological phenomena of personality, a sort of psychological monism, is not only fallacious but is bound to remove psychology from the field of science. Psychology deals with concrete phenomena which are the resultants of a complexity of forces driving in different directions. The law of the final drive is more comparable to the physical law of the 'resultant of forces'":²³ a law according to which, naturally, the precise direction of the resultant "drive" will depend in each instance upon the sort of integration that obtains in the given organism at the moment. But this matter of integration we shall have to discuss somewhat later.

In the meantime, we should note that in Prince's

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view the urges in the mature organism are many of them acquired or at least modified, reconditioned urges. Of especial significance, therefore, are the facts and mechanisms of such modification.

IV

ASSOCIATION, INTEGRATION

THE principle of association, long recognized as fundamental in general psychology, is integral to Prince's theory, and is developed by him in a very far-reaching manner.

It began with observations of that class of nervous affections called "functional," meaning not due to organic causes. As far back as 1890, at a time when these disorders were generally interpreted as essentially requiring treatment by "physical" methods including the "rest cure," Prince urged that "inasmuch as all nervous processes are fundamentally alike in their nature, it is to be presumed that if brain processes, with their correlated mental states, can be welded together into an automatic mechanism, it is similarly true that the physical activities of the spinal cord, although not correlated with subjective states, may also be welded together by association in the same manner; and I believe that with this law so extended . . . many so-called hysterical affections . . . which otherwise are unintelligible, may be understood as "*association neuroses and psychoses*." ²⁴ In other words, the law of association, so extended as to include the modern

"conditioned reflex," is integral to the explanation of a great many functional disorders; such disorders being manifestations of that principle, but so perverted by altered conditions as to maladjust the organism to its larger environment.

This view of association was accompanied by numerous examples, including, for instance, the mother who, long after her child-bearing period, nevertheless had pressure sensations in her breasts whenever she heard a nursing child cry; and the hay fever case in which the usual tears, swelling of the eyelids, fluidic obstruction of the nose, hoarseness of voice, intense itching in the ears and throat, desire to sneeze, and some uncomfortable feelings in the chest, all followed immediately upon presentation of an (unsuspectedly) *artificial* rose. The associational character of these symptom-complexes was further substantiated by experimentally reproducing the same symptoms in a subject in hypnosis.²⁵

But it is in Prince's volume, *The Unconscious*, that there appears the most extensive development of this principle of association (or integration, as it becomes). There are considered, among other things, the *neurological basis* of association in "neurograms"; the nature and rôle of *meaning* in both abnormal and every-day behavior; the significance of *symbols*; the organization and functioning of "complexes" and (larger) systems; the varying integrates composing different *states of hypnosis*; the

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general problem of *integration*; fundamentals of *personality and character*; and the ultimately re-educational nature of *psychotherapy*. Of these topics, that of *meaning* is well worthy of our first consideration.

The every-day fact of meaning, the fact that any object, symbol or idea, comes to have a meaning for us in terms of our experience with it, is trite enough. Indeed, it seems to have been so trite that its significance for a common-sense explanation of much important behavior has been overlooked. For if we regard meaning as inhering in a "setting" or accumulation of experiences integrated about some stimulus, through sensitization of neuron groups functioning with that stimulus (Prince's view²⁶), we have a natural series of phenomena; a series running from the obvious explanation of the difference between an architect's, a landlord's, and a shopper's reactions to a certain department store, through the "association neuroses" already mentioned, the obsessions, phobias, anxiety states and compulsions, to the most bizarre symbolizations by the hysterical subject. True, further complications are involved in the more abnormal portions of such a series; the simple principle of association, as developed in the theory of meaning, is supplemented by other important factors. But the point is that in this conception of meaning as traceable to experience, we have an understandable empirical bridge (to be crossed

farther on) from the usual to the unusual in much human behavior.

Into the details of how such "settings" determine both normal and abnormal reactions, we cannot enter here. For this material the student will wish to consult the pages of *The Unconscious*.²⁷ We must note, however, that the phenomena of individual preferences, emotional outbreaks, tantrums, obsessions, etc., as related by Prince to the mechanism of meaning, show both introspectively and practically (often therapeutically) that normally only a part of the "setting" for a conscious reaction is present in consciousness at the moment, while in abnormal cases often a considerable portion of that "setting" cannot even be brought into consciousness by ordinary effort. In other words, a material part of the determination of behavior both normal and abnormal is, in an important sense, *subconscious* (a conclusion which leads at once into significant problems of the theory of mental organization, the relation of "intellectual" to "affective" elements, the nature of emotion, the bases of mental hygiene, and the like; involving a conception of "the subconscious" we shall have to discuss somewhat).

To the observation that "settings" often *function* subconsciously, we may add that under some circumstances they are *acquired* independently of clear consciousness. This fact, of perhaps as great interest practically as theoretically, is shown in many of

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Prince's studies, particularly of multiple personality, of course, but also of normal persons, as indicated by the experiments in crystal or hypnotic recall, dreaming, or automatic writing of perceptions which had certainly occurred but never in full awareness. In Miss Beauchamp, for example, the personality B IV would often experience marked emotion towards some person or object, without any conscious memory of a reason for that emotion. Time and again, however, it came out that this B IV's fellow-personality, B I, had acquired memories in *her* conscious experience which accounted for the rise of the emotion in question. Similarly B.C.A., unable when awake to describe (any more than could Prince) the details of dress of a friend with whom she had been conversing for some little time, was able to give a minute description in automatic writing; and this when as a "patient" she seemed to be fully recovered. Similar detailed recall of subconsciously perceived experiences has often been obtained in normal college students.²⁸

But though settings be acquired, stored and operative often subconsciously, they are apt to be represented in consciousness by symbols. There is no mystery about these symbols, further than the general mystery as to how associations are possible at all, especially between elements now conscious and elements not now conscious; however, special factors, shortly to be considered, may cause certain

elements active in the total pattern not to come into consciousness. There is no mystery in that these symbols are possessed of no occult profundity, so far as we know. On the contrary, and fortunately for our understanding, the symbols are the conscious elements of associations which express in some way the real history of the individual. Just what the associations are, it is often difficult or impossible to determine, as when attempting to "interpret" dreams; but this fact of multiple possibility only emphasizes the requirement that symbols be regarded from the point of view of open-minded approach in every instance.²⁹

Underlying the symbolisms, and inclusive of them really, are the sentiments or complexes which enter so fundamentally into the make-up of the individual. Prince uses the term "sentiment" in the usual psychological sense (as developed especially by McDougall) to mean an organization of one or more emotional dispositions about an idea or object; except that for Prince, these sentiments may be either conscious or subconscious in their workings, according to circumstances. Similarly, the term "complex" is taken to mean an association or synthesis of ideas, often linked with emotions and feelings. In this usage, "complex" differs from "sentiment" only in emphasis, "complex" calling attention to the complex associatedness, and "sentiment," to the affectivity of various syntheses of ideas. Both terms

ASSOCIATION, INTEGRATION

imply an underlying linkage of neural dispositions, which linkage is rooted in still earlier experiences; so that either term denotes a more or less close-knit pattern, often ready to function as a whole, whether adaptively or unadaptively, or socially or anti-socially.³⁰

When a complex becomes sufficiently complex, sufficiently large and inclusive, it is called a system; complexes and systems being thus only relative terms. Systems are of several kinds, including, especially, "subject systems," or associations of experiences about a common topic; "chronological systems," or memories belonging to certain periods or epochs in the life of the individual; and "mood systems," in which the items are related primarily through their community of affective or emotional attitude. When these different systems become especially disparate, as in certain types of conflict, it is between the systems that a break or dissociation of personality is most apt to occur; "a personality" (where there is more than one in the same individual, as occasionally happens) being only a step more complex than a system. Thus there is a probably continuous series of abnormal phenomena, from a subconscious complex or sentiment up to a subconscious or fractional personality.³¹

As yet we have not considered that process without which a normal personality cannot exist: the process by which associations become organized into

the "something more" than "mental elements," the organization which we call "a personality." This process is what is called integration; and without it, we would have only "the words without the story."

This conception of integration, we should note, has already been implied within the several sentiments, complexes, and systems. Each of these, under abnormal conditions, tends to function as a (separate) whole, maintaining its own integration as a more or less individual pattern. And clearly such multiple integration is regarded by Prince as only a fragmented, perverted, functioning of the integrative tendency which, operating more inclusively, is normal to the organism as a whole. This is brought out in his conception of the dynamic neural relations which underlie all associations of ideas, as well as (specifically) in his explicit recognition of the normally coöperative hierarchy of reflexes characteristic of integration, after Sherrington. Again in the phenomena of actual disintegration (splitting) of personality, the integrative tendency is recognized constantly in the several evidences for *incompleteness* of the dissociation: activity by one personality interfering with the activity of another (in the same individual); a mood in one being reflected in the temper of the other; and an experience by one affecting the consciousness of its fellow, through being stirred indirectly when an associated idea is aroused directly in the fellow-

ASSOCIATION, INTEGRATION

consciousness, or through actively projecting an image of itself thither as a hallucination.³²

All this shows a definite conception of integration as the normal tendency. At the same time, Prince's contacts with facts of abnormality have prevented his making any fetish of the principle of integration. The facts do not justify the tradition of the pure simplicity of the human mind.³³

The problem of the meaning of personality deserves and will receive some consideration by itself, after we have outlined some more basic conceptions. Here we have been interested in the general principle of associative integration, a principle which, as we see, extends far. Indeed this matter of associative integration leads on into the foundations of psychotherapy, another topic to which we shall return.

V

CONFLICT

ONE of the most dynamic points of emphasis with Prince is the fact of conflict. Conflict, as that which it is the function of integration to adjust, is conceived as implicit in all mental activity. "Every mental process involves a conflict and inhibition: in physiological terms a raising of the threshold of the antagonistic mental process in consequence of which it cannot function unless the stimulus be increased. This is a normal mechanism and process." ⁸⁴ And so without attempting distinction between types of inhibition as related to conflict, the normality of conflict is carried further in the clashes that occur often between instincts when aroused by complicated situations; and in the accumulation of sentiments and other "complexes" which often turn out to be mutually more or less incompatible.

As applied to the abnormal, "let us take, for example, somnambulism with the integration of large systems, resulting, without apparent rhyme or reason, in a secondary personality with the loss or dissociation of particular instincts and other functions. To explain such phenomena one must, it appears to me, introduce the principle of conflict, as I

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have done when interpreting the psychogenesis of multiple personality. The suggestion that the subject be hypnotized (that is, 'sleep'), for some reason, obscure at the time, strikes some sentiment or other psychologic component in a large integrated system (in B.C.A., a rebellion against the conditions of life) and thereupon the whole system, in conflict with the rest of the personality, springs into life and becomes the secondary personality.

"But why should certain fundamental and native instincts like fear, anger or sex become dissociated? And why in the same subject in one hypnotic phase should there be a dissociation of one set of traits and certain functions with integration of certain other specific traits and functions, while in a second and third phase the dissociations and integrations are entirely different? Why, for instance, in one phase of hypnosis is there general anesthesia, in another, anesthesia of a special sense, and in a third no anesthesia at all? (This applies to other functions and mental traits, sentiments, etc.) The suggestion in each case was identical, being simply 'sleep' without any specific implication and expectation of the resulting phenomenon, which was a surprise. Here one must look for endopsychic forces as explanations, and among them internal conflicts between mental systems." ⁸⁵

Many other illustrations, provided especially in *The Unconscious*, and chosen from a wide range of

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functional phenomena, suggest the important fact that in current discussions of conflict the conception is often oversimplified. It is often assumed, for example, that if not between two conscious processes, conflicts occur simply between "the conscious" and "the subconscious," or between "the conscious" and some unruly element of "the subconscious." Prince shows, however, that in addition to all the usual conflicts between processes which are conscious, and the well-known conflicts of conscious processes with subconscious processes, there may also be conflicts between processes both of which are subconscious—a fact which, like conflict in a case of multiple personality, "in no way affects the general principle, which is that of conflict between processes." Nor does our author make any limiting assumptions as to the specific interests between which conflicts may occur. That is, instead of assuming that the "repressed" impulse must be of sexual or of egoistic or of infantile character, he commits himself to no special expectation. The conflict generally turns out to be between systems of associations motivated by conflicting urges of various sorts. Hence we are assured only that, in any instance, "whichever instinct or sentiment, meaning whichever impulse, is the stronger necessarily downs the other." ⁸⁶

As thus normal or abnormal (according to circumstances), conflict manifests itself in a rich va-

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riety of ways. These manifestations are shown to include certain types of disturbances of the vegetative functions, aberrations of the emotions, paralyzes, tremors, tics, compulsions, automatic actions, variations of sensibility, disorders of attention, illusions, hallucinations, dreams, obsessions, fabrications, delusions, amnesias, and dissociation of personality; in short, the whole gamut of functional abnormalities, as such abnormalities appear apart from organic conditions. Sometimes the manifestations of conflict become neuroses of types which conserve particular ends, such as revenge against some one; and sometimes the manifestations persist simply as "defense reactions," like arrogance in an apprehensive ruler. Yet all the manifestations of conflict are assumed to be only elaborations of "the normal mechanism by which, on the one hand, mental processes are temporarily inhibited from entering the field of consciousness, and, on the other, physiological functions are normally suppressed. . . . Every mental process involves the repression of some conflicting process; otherwise all would be chaos in the mind." ⁸⁷

VI

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ANOTHER process which, though important for psychopathology, is regarded as a variant of the normal mechanism of inhibition, is the process of dissociation. Abnormal indeed are such instances of dissociation as those "amnesia cases" which, for example, present the appearance of "forgetting" large epochs of the person's life, even his own individuality, but in which actually the experiences are conserved and only await recall under special conditions. Nevertheless, if such phenomena are to be explained, "it must be that there exists normally some kind of physiological mechanism which allows [dissociation or] disintegration to occur, and that normally, *within certain limits*, such disintegration is constantly occurring as a part of the mechanism of normal cerebration. In hysteria this physiological mechanism is carried to an extreme and pathological degree. . . . Whatever the anatomical change may be, I am at one with Sollier in believing it to be the *same as normal sleep, only localized*"; amounting to some suppression of function of the "highest association centers." ³⁸

Naturally, mental strain with fatigue predisposes

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to such dissociation. Thus Miss Beauchamp's many alterations of personality often followed directly upon mental strain. Similarly the initial split which really brings an individual into the multiple personality group has been observed to occur commonly at a time of mental stress. Another factor conducive to dissociation (because conducive to conflict along with mental strain and fatigue) is intense emotional disturbance, such as great fright. This is illustrated by cases of multiple personality again, along with many a case of hysteria.³⁹

In a later formulation, Prince adds the important factor of conflictful "inhibition" to explain dissociation (in marked divergence from the influence of Janet). The principle of that dissociation which can become pathological is thus regarded as "conspicuous in absent-mindedness and voluntary attention when every antagonistic or irrelevant thought and even consciousness of the environment is prevented by a conflicting force from entering the field of consciousness." Again, "for example, in the heat of anger, the mind is dominated by the particular object or thought which gave rise to the anger, or by anger exciting associated ideas. Conflicting memories and correlated knowledge that would modify the point of view and judgment and mollify (inhibit) the anger are suppressed and cannot enter the focus of attention. Further, a person in such a state may not perceive many ocular, auditory, tac-

tile and other impressions coming from the environment; he may not see the people about him, hear what is said, or feel what is done to him, or only in an imperfect way. All these sensations are either actually inhibited or prevented from entering awareness (dissociated) by the conflicting conative force of the emotion. In other words there is a dissociation (or inhibition) of consciousness and consequent contraction of its field to certain emotional ideas. . . . When this same general contraction of the field of consciousness, effected by the repressing force of emotion, reaches a certain acme we have a pathological condition—*the hysterical state* . . .—a condition of mono-ideism.”

Yet “to attribute these effects of emotion to repression *from conflict* is only to express the facts in different terms. But it would be often an over-emphasis to describe what takes place as a specific conflict between particular sentiments. It is often rather the discharge of a blind impulsive force in every direction which, like a blast of dynamite, suppresses or dissociates every other process which might come into consciousness and displace it.”⁴⁰

Often, of course, dissociation is quite systematized along the patterns of complexes and systems, but with manifestations just as various as those related to conflict in the preceding section. In fact, these systematic manifestations of conflict and of dissociation tend to be the same, and most obtru-

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sively, in so far as conflict results in what can be described as more permanent dissociation. The systematizations which do occur, however, throw into relief the principle of associative integration again. "The principle involved is this: When a specific idea or psycho-physiological function (memory, sensation, perception, instinct) is by any force dissociated, the exiled idea or function tends to carry with itself into seclusion other ideas and functions with which it is systematized. The dissociation is apt to involve much more than the particular psychological element in question in that it 'robs' the personal consciousness of much else." Of this principle numerous and significant examples occur. Minor types of such dissociation are the bases of moods; more extreme types amount to splitting of personality.⁴¹

By way of illustration, Prince observes that "on the mental side, dissociation (and inhibition) may involve the memories of whole epochs in the subject's life. Thus Mrs. J., when hypnosis [a condition illustrative of dissociation] is induced, reverts suddenly and unexpectedly back nine years to the day just before she received an emotional shock, and imagines it is that day. There is complete amnesia for the whole intervening time of nine years. Again the dissociation may involve intellectual acquisitions such as languages; thus Miss B. at one time in hypnosis has complete amnesia for Latin

and at another for French, although she knows both well. Some of the most striking alterations result from the dissociation of sentiments, deeply cherished beliefs and ideals. Intensely held religious sentiments and beliefs may be completely dissociated and lost in one or another phase. Likewise, sentiments of aversion or affection toward persons may disappear and may be replaced by their opposites. This substitution may be traced to a reversion to the sentiments that obtained toward the same object at an earlier epoch of life. B.C.A. acquired in an *A* phase a most intense aversion amounting to scorn and hatred toward a certain person X, with whom, at an earlier epoch, she had held pleasant and friendly relations; in the *B* phase, the earlier sentiment of friendship recurred and became reintegrated with the personality of this phase. In the affective field, dissociation may be equally distinctive. Fear was totally absent in more than one case; the loss of hunger was noted in another. And similarly on the physiologic side the personality may lose a variety of functions, the most conspicuous being those of sensation and motility.”⁴²

“Janet, when interpreting such phenomena, attributes them to ‘psychological feebleness’ in consequence of which the personality cannot synthesize more than a certain number of emotions and ideas to form the personal self-consciousness.” It is true that in the case of the multiple Miss Beauchamp,

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as in other cases, the excitation of an emotion resulted regularly in an alternation of personality, a phase in which certain emotions and interests were conspicuously absent. And it is true that the same sort of impoverishment of consciousness is noticeable on a smaller scale in the lesser types of dissociation. But in Prince's more recent opinion this impoverishment or breaking of consciousness cannot be understood in terms of *feebleness*. "Many hysterics can synthesize quite as *many* psychological elements as a normal person, but not sentiments and emotions of a certain *character*, that is, those which pertain to certain experiences, to certain systems of remembrances." The *explanation* of the phenomena of dissociation is, therefore, to be sought in the *conflict* factor already touched upon. "The conflict is between the impulsive forces of the emotions pertaining either to antagonistic instincts or to sentiments organized within different systems. . . . The *result* you may call '*feebleness*' if you like." ⁴³

VII

CONSCIOUSNESS AND "THE SUBCONSCIOUS"

THE conception of an active "subconscious" was brought forward as a psychological problem by Myers, Janet, Gurney, and others, during the years 1885 to 1887 and thereafter. For a while it seemed that the followers of "psychical research" were the ones to be most interested. But by 1890, when William James's notable discussions of subconscious phenomena appeared in his *Principles of Psychology*, Prince had begun his long series of investigations to establish the whole problem upon a scientific basis. In particular, Prince sought to ascertain by experimental methods: (1) whether there were any "subconscious" processes; (2) whether such processes, if actual, were "purely physical," neurological, as Münsterberg and others claimed, or were conscious in some way (though *sub*conscious); (3) what the capacities of any subconscious processes might be, what they could do and what they could not do; (4) in abnormal cases, whether such processes could really induce the mental and bodily derangements ascribed to them by certain clinicians; (5) whether such processes occur, otherwise than as artifacts, in normal individuals; and (6) if they do

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occur, what the rôle of such processes may be in the normal mind.⁴⁴

Now it is a common experience for teachers of psychology that at the beginning of the course a very large number of the students will regard automatic writing, subconscious mathematical calculations, multiple personality, and hypnosis as only old wives' tales or superstitions of the unscientific. Even a demonstration in the classroom, showing automatic writing, complex actions motivated by previous (hypnotic) suggestions of which the subject is now unaware, and calculations of mathematical problems accomplished by the subject while his waking attention is otherwise engaged, will fail to convince a few of the more conventionally minded students, for a time at least. Only after a variety of instances have been considered with their mechanisms will the doubting students come to accept them as facts. It is therefore not surprising that for an audience of unaccustomed students and physicians Prince's publication of the autobiography of his B.C.A. case ("My Life as a Dissociated Personality") should have been prefaced with a statement by Drs. James J. Putnam and George A. Waterman that "in the first place we are convinced that the patient is a truthful witness, a conscientious observer, an intelligent and right-minded person. In the next place, we believe that what she describes as memories were memories and not vaporings or

fabrications. The facts which she gave to us, as 'State B,' are faithfully transcribed in this account. As she told them she made on us the impression of a person narrating her experiences and ready to be cross-questioned on them. Furthermore, a number of her statements were susceptible of verification and were verified by us." ⁴⁵

Prince's findings in the general field of the "sub-conscious" may perhaps be regarded as his most important contributions. Certainly the data he has gathered, and the conclusions he draws, are of great interest. Into the details of his studies we cannot enter here; Prince's accounts (*The Unconscious*, etc.) are readily available to the student. But we may observe by way of summary that relative to the questions propounded Prince has concluded that (1) there *are* subconscious processes, at least in the same sense in which there are electrons and other objects that have not been seen but have been assumed as explanatory for observed phenomena; (2) there is evidence for the view that some of these processes are conscious though more or less separate from the every-day consciousness; (3) these subconscious processes show further, in some situations, the capacities of memory, feeling, emotion, perceiving, constructive thinking (fiction writing, drawing, painting, versification, solving problems, reasoning generally), and willing—capacities ranging all the way from cognition of a sensation

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and the induction of a simple movement such as a tic, to intellectual and motor processes sometimes even more highly developed than those of the individual's "personal consciousness"; (4) in abnormal cases, Prince finds, such subconscious processes can and do produce conflicts, inhibitions, dissociations, automatisms, etc., resulting in all sorts of phenomena such as amnesias, confusion of consciousness, emotional conditions, trance states, hallucinations, delusions, motor phenomena of many kinds, and disruption of personality; (5) as for subconscious processes in normal individuals, it is hard to evaluate these, because by the methods of experimentation (hypnosis, automatic writing, crystal gazing, and even free association, as we shall see) artifacts are produced which may put the normal individual into the abnormal group for the time being, with phenomena resulting as above; yet (6) the common experience of "taking a problem under advisement" while thinking primarily of other things, the well attested sudden emergence into consciousness of the solutions of problems which hitherto the individual had been unable to solve consciously, occurrences like "sudden" religious conversion, the retrospective memories in states of abstraction and hypnosis of previous subconscious events, and the phenomena of dreams and their after-effects, all indicate that subconscious processes do play a part in "normal" mental life

and hence deserve more study than they have as yet received.⁴⁴

Normal consciousness itself, when examined, leads to some conception of "the subconscious." Consciousness displays on the one hand a constant renewal of itself through reviving earlier experiences (memories); and on the other hand consciousness contains a peculiar shading off of vividness, from the clear focus of attention to the vague periphery or "fringe of consciousness." This shading from focus to margin has suggested to many persons the idea of "levels" of consciousness; and the way elements leave and return to consciousness suggests that the recurring elements are "stored" somewhere, perhaps on a different "level," in the meantime.

But we are not compelled to assume any mystical "level," or "reservoir," to account for the "storing." As Prince insists, the "storing" is only the conservation of neurograms, synaptic connections which can be made again, neural processes which can be re-aroused upon occasion: the conservation is not of memories as such, but of "dispositions," *conditions* for the recurrence of memories. What is more, the conservation itself is limited; even if an experience has been registered or impressed, "*this physical register may be conserved or not*"; it may naturally fade out.⁴⁵

Among the "physical registers" that *have* been conserved, Prince distinguishes several types. There

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are of course the active neurograms whose conscious equivalents form the personal or main consciousness of the moment. These we may leave aside now. Of the remaining types there are, first, the quiescent neurograms, elements inactive at the moment. Another group, Prince supposes, is made up of neurograms which are active but without involving any consciousness in their processes. That is, these neurograms are "purely physiological," non-conscious, in their activity; just as the preceding lot, the latent elements, are to be regarded as non-conscious in their inactivity. And because of this common lack of consciousness on the part of both groups, Prince comprehends them both under a common term, the *unconscious*.⁴⁷

There are also, for Prince, neurograms of two special groups. One of these groups constitutes the classical "fringe" of consciousness. Here are the elements for which the individual has a dim awareness, and which he can recall through ordinary retrospection. Prince observes, too, that in the fringe some processes occur which, when caught in retrospect, seem to have been more vividly and dynamically conscious than the individual realized at the time; in these particular processes an extra measure of local or provincial consciousness, so to speak, is discoverable. Between the fringe and the remaining special group, an "outer zone" where awareness of the elements fades away and ceases,

no sharp line can be drawn. This final group, according to Prince's classification as an outer zone, is made up of elements of which the individual is not aware, and which he cannot recall by ordinary retrospection, but which can be recalled through various states of abstraction as processes which were conscious, conscious in themselves, at the time they were occurring outside the personal consciousness.

Whether in the fringe or in the outer zone, these particular processes usually turn out to be quite elementary affairs, which though conscious, lack *self*-consciousness. But in more complex cases, with more conflict between the component elements, these "side-thoughts," processes of perceiving, remembering, reasoning, and willing, become "constellated" or organized beyond the fringe into one or more disparate intelligences, sometimes even full-fledged personalities, personalities which may be actively self-conscious although outside the "main" or "every-day" consciousness. Thus such co-functioning disparate personalities, bizarre as they seem to be on first thought, are logically brought into the same category with the phenomena of the fringe and outer zone of the field of the every-day consciousness. But whatever the degree of development of conscious processes in and beyond the fringe, Prince applies to all such processes a special caption, namely, the adjective *coconscious*.⁴⁸

In short, the term *coconscious* is limited by defi-

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dition to whatever processes, outside the central personal awareness, possess consciousness; while the probable cerebrations which go on without any consciousness, are described simply as unconscious processes.

This definition does not pretend to settle the question of the relative importance of coconscious and unconscious processes in an individual's life. Neither does it signify any hard and fast line between the components of the two groups. Prince maintains rather that interchange of elements, interchange such as occurs constantly between the fringe and the focus of attention, may take place between groups of processes which are outside the focus of attention, and which may or may not be conscious in themselves.

A most important further qualification of this whole topic is that there is no sharp boundary between the total field of coconscious and unconscious processes and latent neurograms, on the one hand, and the field of personal consciousness on the other. It is normal for elements to pass back and forth here with freedom. In abnormal cases, the freedom is merely reduced; as in the Beauchamp case, where knowledge of French would shift from B I to B IV, but only occasionally, so that the language was not normally available to either personality at all times. Emphatically, "from this point of view, . . . there is, *normally*, no distinct 'subconscious

self, or 'subliminal *self,*' or 'secondary *self,*' or 'hidden *self.*' In artificial and pathological conditions there may be . . . a splitting of consciousness and the aggregation into a secondary coconscious system of large systems of ideas which have all the characteristics of personality. . . . But there is no evidence that, *normally*, such systems exist." ⁴⁹ The evidence is quite to the contrary.

In what sense, then, may we use the term, "*subconscious*," as distinguished from "the unconscious" and "the coconscious"? In Prince's view, the subconscious is only a name which covers all elements, active or quiescent, coconscious or unconscious, which are not now participating in an individual's ordinary awareness: the subconscious is a name for all the unconscious and coconscious elements together. And as such, we have seen, it is nothing sharply delimited, nothing mystically personal, and for that matter, nothing any more archaic or infantile or uniquely creative than the individual's natural resources in neurograms and his particular conflicts would lead us to expect. Nor is this subconscious to be regarded necessarily as "inferior" to, or "lower" than, or *spatially* "beyond," or "outside" the "central" consciousness. All these words are mere metaphors which have no fixed relation to the facts of mental life. Besides, in *some (pathological) cases*, as remarked, where the "main" consciousness has been robbed to the profit of a vigor-

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ous subconscious organization, the subconscious system is more inclusive and competent than is the "main" consciousness itself. And even normal persons carry on their elaborate calculations and solutions of problems subconsciously at times. True, the subconscious may be said to possess a sort of social inferiority to the waking consciousness, since the latter is the organization with which other people deal directly; and from the level of polite society (as of science) any disparate, individualized "subconscious personality" is properly to be looked down upon as abnormal. But in any event, "subconscious" is the adjective Prince applies to all the "brain residua" and all psychological processes which occur without the "central" personality's awareness. The term "subconscious" thus covers a multitude of processes such as are described in, for example, *The Dissociation of a Personality*, and the later volume somewhat misleadingly entitled *The Unconscious*.⁵⁰

Of course the foregoing is confessedly only a theory with technical terms to explain the facts; and the facts themselves are not always clearly classifiable. Thus "very likely, . . . what appear to be secondary [that is, coconscious] trains of thought are often only alternating [conscious] trains." Indeed, after all his first-hand observations, Prince admits quite freely that "strong as the evidence for subconscious mental processes is, it still lacks abso-

lute demonstration. Take, for example, subconscious [coconscious] writing. No one yet has undertaken to show by laboratory methods of precision that it is not done by rapid oscillations of different dissociated systems of consciousness, each for the moment becoming the personal consciousness, but with amnesia for the preceding moment . . . ; [though] we admit that this interpretation on all the evidence at hand (and there is much) is exceedingly unlikely.”⁵¹

In connection with this view of the conscious and the subconscious, we may note that *personality* is evidently a unique organization of inherited and acquired dispositions, involving particularly the sentiments and systems of ideas and interests as developed in the individual. This organization, however, with its normally high degree of unity or integration as a “dynamic system,” is not to be taken in any superstitious or mystical sense, after the primitive soul tradition. Mystery indeed there is, just as there is mystery in all the atomic, crystalline, and other structures in nature; but this fact of general mystery is no reason for oversimplifying our conceptions of the observable complexity of mental life. The normal “sides to one’s character,” the abnormal exaggerations of conflict and autonomy of dissociated processes, the therapeutic measures (yet to be considered) of reintegration of personality, all point to a concrete and relativistic conception of

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personality organization, as contrasted with the conventionally abstract view.⁵²

And that orthodox characteristic of human personality, "*self-consciousness*," is regarded similarly as dependent upon some composite of neural activities. This is no support, however, for the frequent assumption that all consciousness must be self-consciousness. None of the facts of minor coconscious activity supports such an assumption. As Prince reports, "the introspective testimony of my dissociated subjects, who in that condition recalled vividly and precisely these subconscious experiences, has been unanimous that these experiences were without self-consciousness, that in their content there was nothing that the personal pronoun 'I' could be applied to. The subject could not say, and there was nothing that could say, 'I saw this,' 'I felt that'; the perceptions, feelings, etc., were not synthesized into a self or personality. The conscious events were just sensations, perceptions, images and 'thoughts' and nothing more—no agent, nothing that could be called a *psychological* 'experiencer.' " For that matter, the primary consciousness itself may become "depersonalized," being reduced to "just thought," with no "I." This is particularly noticeable in hysterical cases, but it can be observed also in our own periods of "intense mental concentration or absent-mindedness. Here is no awareness of self, only a succession of ideas which adjust and

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readjust themselves. It is not until afterwards, on 'returning to one's self,' that these ideas through memory become a part of our self-conscious personality." ⁵³

Finally, the notion of "the collective consciousness," often discussed by social philosophers and lately associated with "the collective unconscious" by Jung and others, has been considered by Prince. He reduces it, however, along with "the national conscience," public opinion, etc., to "common habits of thought and conduct derived from mental experiences common to a given community and conserved as complexes in the unconscious of the several individuals of the community": an analysis which justifies the hope for the development of "a world consciousness in international relations." ⁵⁴

VIII

THE GENESIS OF FUNCTIONAL DISORDERS

WITH regard to Prince's understanding of mental disorders, the dynamic elements have been suggested in the foregoing account of his general theory. Here we have to bring together more completely his view of the causes of functional abnormalities.

Prince is convinced, of course, of the reality of "the organic" or "structural" maladjustments which account for many forms of nervous and mental disease. At the same time, he is aware of the frequent complications of such "physical" pictures through superimposition or intertwining of "functional" disorders with the "organic" factors. And as for the "purely functional" abnormalities, he emphasizes their essentially comprehensible character as natural phenomena; their relativeness or relativity, as aberrations of the normal, lacking sharp boundaries; and their importance as sources of insight into human behavior. For these functional disorders may be understood, he feels, through the processes of lowered psychological resistance, conflict, dissociation, subconscious incubation, and abnormal reintegration, often following upon untoward experiences or miseducation or both.⁵⁶

There are at the same time certain special observations and generalizations of interest in this connection. The omnipresent factor of association has already been sketched, with integration, in the earlier pages of the present study. It should be added that frequently the important associations that enter into functional diseases are traceable to suggestion, either from within or from without, or both. Suggestion from outside the patient is illustrated in the observation that "sometimes a phobia complicates a true organic disease and produces symptoms which mimic the symptoms of the latter—heart disease, for example. In this case it is often difficult to recognize the purely phobic character of the symptoms. O.H.C. was such a case. Though there was severe valvular disease of the heart, compensation was good and there was little, if any, cardiac disability. The attacks of dyspnoea and other symptoms were unmistakably the physical manifestation of a phobia of the disease. The phobia had been artificially created by overcautious physicians." ⁵⁶

Autosuggestion, similarly, may establish associations which will cause trouble, especially if conflict is present. Thus, "in a moment of discouragement and despair B.C.A., torn by an unsolved problem, said to herself after going to bed at night, 'I shall go to sleep and I shall forget everything, my name and everything else.' Of course she did not intend

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or expect to forget literally her name, but she gave expression to a petulant despairing conditional wish which if fulfilled would be a solution to her problem; as much as if she said, 'If I should forget who I am my troubles would be ended.' Nevertheless the autosuggestion with its strong feeling tones worked for repression. The next day, when about to give her name by telephone, she discovered that she had forgotten it. On testing her later I found that she could not speak, write, or read her name. She could not even understandingly read the same word when used with a different signification, i. e., stone [her name, we will suppose, is Stone], nor the letters of the same. This amnesia persisted for three days until it was removed by my suggestion. That the lost knowledge was all the time conserved is further shown by the fact that during the amnesia the name was remembered in hypnosis and also reproduced by automatic writing." ⁵⁷

Passing on from suggestion in particular to the significance of antecedent "set" or expectation in general, we note that "many forms of trauma which are followed by the development of a neurosis if occurring under circumstances that are attended by fear or emotional excitement or apprehension of danger, whether conscious or subconscious, are harmless under the opposite circumstances. An inquiry which the writer [Prince] made into the effect of football accidents may be cited in illustration

of this statement and in support of the psychical theory. Any one who has watched a football game must have been struck with the severe physical shocks to which the players are subjected. A player weighing one hundred and sixty to one hundred and eighty pounds and running at full speed must, when suddenly tackled and thrown, strike the ground, often on his head, with a force equal to that inflicted in many railroad accidents. Sometimes the physical blow must far exceed that expected by the victims of the latter class of accidents, in which, as is well known, the trauma may be very slight even when a severe neurosis has resulted. Observing this, it occurred to me to write to the surgeons or managers in charge of the principal college teams asking whether traumatic neurosis had ever been observed to follow football accidents. Answers were received from six colleges. . . . In every instance the reply was negative. . . . Similarly, I have never heard of a traumatic neurosis caused by blows of the fists in sparring or prize-fights, but, it is true, I have never made systematic inquiries into this class of injuries. It would seem, then, that there was needed another element which is present in one set of accidents and is absent in another.”⁵⁸

Really underlying “set” and expectation is the rôle of stored experiences which provide the *meaning* for new impressions. This matter of meaning, as indicated in the section on associative integra-

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tion, above, explains a number of things. It is in meaning, in conserved neurograms, that there exists the "neurographic fuel," or the "psychological torch," which is so often "struck," "touched off," or "set aflame" by some spark from the present environment. Here, in other words, we have the material explanation for many of the exaggerated and surprising emotional outbursts of every-day life. "For example: a husband good humoredly and thoughtlessly chaffs his wife about the cost of a new hat which she exhibits with pride and pleasure. The wife in reply expresses herself by an outburst of anger which, to the astonished bystander, seems an entirely unjustifiable and inexplicable response to an entirely inadequate cause. Now if the bystander were permitted to make a psychological inquiry into the mental processes of the wife, he would find that the chaffing remark had meaning for her very different from what it had for him, and probably also for the husband; that it meant much more to her than the cost of the hat. He would find that it was set in her mind in a number of antecedent experiences consisting of criticisms of the wife by the husband for extravagance in dress; and perhaps criminations and recriminations involving much angry feeling on the part of both, and he would probably find that when the hat was purchased the possibility of criticism on the ground of extravagance passed through her mind. The chaffing remark of the hus-

band therefore in the mind of the wife had for a context all these past experiences which formed a setting and gave an unintended meaning to the remark. The angry response, therefore, was dictated by these antecedent experiences and not simply by the trivial matter of the cost of a hat, standing by itself. The event can only be interpreted in the light of these past conserved experiences. How much of all this antecedent experience was in consciousness at the moment is another question. . . . (A knowledge of this principle shows the impossibility of outsiders judging the rightness or wrongness of misunderstandings and contretemps between individuals—particularly married people.)”⁵⁹

Another important factor in the development of functional disorders is found in the tendency, also touched upon previously, for memories and experiences of a particular emotional tone to associate strongly with other items of the same kind, and, if in marked opposition to the ideals of the central personality, to incubate subconsciously. That is, these disliked but mutually congruous elements gain in strength of organization gradually and for a time unnoticed, partly through taking unto themselves such new elements as fit in there better than elsewhere in the personality, and partly through elaboration of bonds, interconnections, organization, within the little system itself. This process of incubation seems identical, at root, with the process

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of subconscious solution of problems. In its more pathological form, incubation is manifested most strikingly in the histories of multiple personalities; but it is revealed also in many emotional outbreaks, tantrums and the like, and in such more benign occurrences as "sudden religious conversion." In all of these, apparently, the process is the same: impressions, suggestions, grievances, or whatever they may be, are "put out of the mind" supposedly, but actually tucked *into* the mind inconsistently with the components of consciousness, more or less isolated from consciousness, yet fed on the side, as it were, from daily experience; with the result that after the incubation process has gone far enough, these "repressed" elements erupt with effect, most commonly at a time of emotion or of fatigue or other weakness of the higher levels.⁶⁰

"Repression" itself, as a principal type of conflict, is naturally a potent source of functional disorders. And here we may note that although Prince does not distinguish clearly between different types of repression as a process, he does urge, with regard to the objects of the process, that "there is one important *difference between the ultimate consequences of the repression of an instinct and of a sentiment*. If an instinct is repressed . . . it is inhibited. . . . Thus . . . anger, or fear, or tender emotion, or self-assertion, or disgust, in certain persons cannot be awakened except by very unusual

stimuli. In other words, the psycho-physiological reflex is . . . in abeyance . . . as in an organic reflex (that is, the knee-jerk) which has been inhibited. Normally, of course, it is rare for an instinct to be absolutely inhibited excepting temporarily . . . [or with respect to a special setting or system, as usually in multiple personality]. There is, however, one exception, namely, the sexual instinct, which may be inhibited during long periods of time. In women this inhibition is common and is effected, as I believe, by the subtle . . . social taboo. . . . With sentiments, however, the case stands differently." A sentiment, even though repressed, "is not necessarily absolutely inhibited but may be simply dissociated and then be *able to take on dissociated subconscious activity*." ⁶¹ In other words, it is the "repression" of sentiments that especially favors the development of the abnormal subconscious phenomena indicated in the preceding section.

For that matter, conflict of any sort, or conflict in general, if sufficiently acute, predisposes to functional troubles. As described in the special discussion of conflict above, this conflict, "motivated by emotion," may be between any of the multitudinous factors that compose our interests, and between factors of all degrees of consciousness. Naturally, therefore, an individual with varied and competing interests, without adequate integration or organization of those interests in the pattern of his life, will

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be most susceptible of conflicts. And naturally individuals will differ with respect to their native interests, and with respect to environmental cultivation of, or stress upon, any incoördinate interests. In the same way individuals no doubt differ in what we might term their dissociability, their fragility of integration. And all the conditions that predispose to dissociation in general—fatigue, toxins, drugs, emotion, states of heightened suggestibility, and the like—are, or may be, important factors in the course of events leading up to a functional disorder.⁶²

Given dissociation, we are not surprised to find active in many a functional disorder processes which are beyond the "fringe" of ordinary consciousness, as well as processes which are in that "fringe" under certain circumstances. Consequently, when investigating a phobia or similar pathological condition, Prince is in the habit of inquiring (by methods to be outlined soon) "into the fringe of attention and even the ultra-marginal region, and reviving the ideas contained therein, particularly those for which there is amnesia." His "purpose has been to discover the presence of ideas or thoughts which as a setting would explain the meaning of the idea which was the object of fear (a phobia), the exciting cause of psycho-neurotic attacks, etc." "Thus, in H.O., attacks of recurrent nausea and fear almost preventing social intercourse were always due to thoughts of self-disgust hidden

in the fringe." Similarly, "C.D. was the victim of 'anxiety attacks' or indefinable fear of great intensity attached to no specific idea that she knew. As a result of searching investigation . . . it was brought out that the specific object of the fear was *fainting*. . . . The question now was, what possible meaning could fainting have for her that she so feared it? . . . On still further investigation," Prince found "*the idea of death as the meaning of fainting. Of this she was never aware. It was really subconscious.*" Yet it was the real object of her fear; and was of course traceable further to incidents, impressions in her experience, which provided the linkage.⁶⁸

As a matter of fact, active subconscious processes are themselves capable of effecting dissociation, under proper conditions. This "can be very neatly studied with coconscious personalities, as such personalities can give very precise information of the mode by which the displacement of the primary personality is effected. In the cases of Miss B. and B.C.A., 'Sally' and 'B,' respectively, have done this. It appears, according to this testimony, that coconscious 'willing' or strong conation, even simply a wish to inhibit the principal consciousness, would effect that result. Thus, for instance, B testified: 'When A is present I can "come" voluntarily by willing, that is, blot A out and then I "come." . . . By willing I mean I would say to A: " . . . Go

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away"; "Get out of the way"; "Let me come: I *will* come," and then A disappeared. She was gone and I was there. It was almost instantaneous. . . . Sometimes the wish to change would blot out A without actual willing.' In the case of Miss B.," and later in the case of Mrs. O., similar testimony has been obtained, showing the tendency of "coconscious willing and wishes" to effect increased disruption of the formerly dominant consciousness.⁶⁴

A further point, suggestive of our earlier discussion of integration, is the observation that the functioning of dissociated processes is naturally more intense, more crude and indiscriminating (more a matter of "all or none"), and more strongly emotional, than are the processes normally integrated with consciousness; apparently because the dissociated processes are "cut off, by the very fact of their dissociation, from the inhibitory influences of the normal mental life."⁶⁵

IX

TYPES OF FUNCTIONAL DISORDER

BUT what now of the disorders themselves, the results of all these pathogenic mechanisms? Do any suggestive groupings, or any order, emerge from the great variety of functional abnormalities? Variety there certainly is; and in surveying it Prince accords with the modern trend in regarding the clinical terms, "neurasthenia," "psychasthenia," and "hysteria," as mere labels for extremes of symptom groups, not as disease entities. The important realities are the mechanisms (meanings, conflicts, and so forth) which produce these groups of symptoms; and it is these mechanisms which are most significant for the student of general psychology and of psychotherapy alike. But the mechanisms do become revealed in symptom-complexes which are themselves very suggestive for the student of mental processes.

There are the "association or habit neuroses," often mimicking organic disorders;⁶⁶ the more complex disorders likewise involving habit formation, which include some kinds of extreme bashfulness, confusion, "self-consciousness," often associated with such physical symptoms as stammering, tremor,

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and the like;⁶⁷ and similarly habitual in an important respect, as we shall see, are the *dissociations* of many types. Among the phenomena resulting from dissociation are for example the various symptoms of hysteria, including many anesthetics, paralyses, physiological anomalies such as bleeding from membranes, pains, convulsions and various crises, sundry mental alterations, emotional anomalies, changes of character, hallucinations, and so on. Of clearest import in this connection are the amnesias (epochal or localized amnesia limited to the events of a certain period of time, systematized amnesia applied to a group of experiences related otherwise than chronologically, general amnesia "covering the whole previous life of the subject," and continuous amnesia, or amnesia "for events as fast as they are experienced" yet with demonstrable conservation of these experiences)⁶⁸ and the fugues or wanderings commonly associated with amnesia of some sort.⁶⁹

Akin to the fugues, but resulting in a different form of behavior, are the sundry mono-ideisms, really preoccupations with too intense memories, which represent one kind of hysterical attack.⁷⁰ Then there are the preoccupations in which the too vivid memory or fixed idea, instead of periodically driving all others from consciousness, is itself downed in the conflict, dissociated from consciousness uninterruptedly, yet keeps on functioning co-consciously, literally as a subconscious preoccupa-

tion. This is the "subconscious fixed idea" of Janet, and may through its disparate self-maintenance rob the consciousness of various sensory, motor and ideational capabilities.⁷¹ Intimately related to the "subconscious fixed ideas" are the obsessions, phobias, etc., in which, as we have seen, the significant part of the setting or meaning of the reaction is likely to be found beyond the fringe of consciousness, although with effects (emotional, etc.) in consciousness.⁷² Especially interesting in this connection, and suggestive perhaps of rather deep principles of the general workings of the mind, is Prince's conclusion that the phobic and other obsessions "may be arranged by gradations in types in which they appear:

"A, as purely physical disturbances;

"B, as physical disturbances plus conscious emotion;

"C, as physical disturbances plus conscious emotion plus a specific idea of the object of the emotion, but *without* logical meaning;

"D, as physical disturbances plus emotion plus idea plus meaning."⁷³

These gradations of obsession remind again of Prince's emphasis upon what we have called the "relativeness" of functional disorders; a relativeness upon which he insists just as much when we

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come to the major types of dissociation. There are, for example, as Gurney pointed out earlier, *many* hypnotic states possible and natural for the same individual. Nowhere does Prince write of "the hypnotic condition" as the manifestation of "the subconscious personality" or any such entity. On the contrary, "it must be plain that hypnosis is nothing more than the dissociation of the personal consciousness, and differs in no way from any state resulting from the disaggregating process." "Between the two extreme types of hypnosis, the so-called lighter and deeper states (mere figures of speech, by the way), every degree and variety of dissociation, inhibition and integration occurs. The differences of type are brought about by differences in the motivating impulses that effect dissociation and integration. This point of view is important and fruitful in that it allows one, on the one hand, to relate hypnosis to fundamental principles governing the functioning of the mind and, on the other, to class it in a large category of normal states such as sleep, abstraction, revery, mystic ecstasy, moods, absent-mindedness and emotional crises, and abnormal states, such as trance, hysterical crises, fugues, somnambulisms and double personalities"; showing the closeness of the relation between the various forms of dissociation and multiple personality, and why the study of the latter throws into beautiful relief the mechanisms that underlie hysteria and

all the functional aberrations. For it should be understood that "multiple personality" is not a theoretical hobby based upon a few cases and then read *in toto* into every abnormality of mind. Multiplicity of personality occurs in varying degrees of distinctness; and the most marked form represents clearly only the extreme of organized dissociation with abnormal reintegration. This is why, however, multiple personality is as peculiarly illuminating for the general psychopathologist as plant pathology is for the plant physiologist.⁷⁴

In its beginnings, any case of multiple personality is likely to show well the processes of association, incubation, conflict, strain, and dissociation, with the phenomena naturally resulting, as sketched in previous pages. As a full-fledged "multiple," alternation of personalities or of character (*with or without* amnesia), coconsciousness, and all sorts of functional abnormalities may be manifested. Again, so far from indicating the existence of *a* subconscious personality with conventional characteristics as popularly conceived, the actual observations are that secondary personalities "may possess very acutely endowed mental faculties, or they may have mental faculties so impaired as to live a life of delirium or dream life, or to be little more than demented. In character they may be highly moral, or they may be so-called degenerates of an extreme type, given to lying, stealing, brawling and other crimes" (expres-

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sive of "sides" of the original character). Especially, these "secondary" phases of personality are apt to be quite varied or even multitudinous in the same individual. Miss Beauchamp is only one striking illustration of this fact. Hence it follows that "theoretically, a normal personal consciousness may be disintegrated in all sorts of ways, so that any group of memories, and even functions and faculties, may be lost; and all sorts of combinations of memories, functions, and faculties may be formed. Practically, we find that what is theoretically possible actually takes place," just as "in the case of Miss Beauchamp, new personalities or new hypnotic states could be formed out of each of the others." It is easy to see that in the every-day phenomena of moods, we have at once an indication of the mechanisms of multiple personality and an illustration of the operation of those mechanisms in lesser but practically important ways.⁷⁵

Thus we have glimpsed the range of the functional disorders Prince has observed. Of course a great many of his observations are but corroborations of the findings of others. Janet especially, and Freud, as the sequel will indicate, have contributed largely both to the materials and to the interpretations used by our author. But we must note that Prince's interest has been primarily neither in collecting specimens nor in championing some current interpretation or understanding of these disorders. His

interest has been rather in the search for facts and underlying principles.

In his theoretical formulations, we have seen already how Prince takes issue with Janet on the notion of "feebleness" as the major explanation of dissociation; and with regard to Freud, we have seen how Prince goes beyond him in considering the complexities of "the subconscious" and the variety of abnormalities that have given rise to that conception. Prince differs further and fundamentally from Freud, though the amount of agreement should not be overlooked, in his understanding of conflict,⁷⁶ hallucinations,⁷⁷ dreams,⁷⁸ symbolisms,⁷⁹ "anxiety neuroses," phobias,⁸⁰ the psychoneurotic phenomena generally, and the principles of therapy. Many of the important points of difference on these topics, exclusive of therapy, have been indicated, for those who know Freud, throughout our discussion. A single example may suffice here: an "anxiety neurosis," for Freud, is traceable to unadjusted sexual urges which conflict with the "censor"; while for Prince the anxiety is the emergence of emotion belonging to a subconscious fear complex (which may or may not involve the sexual interest, according to the individual case).⁸¹

Undoubtedly Freud has made a unique contribution to our understanding of functional disorders. His formulations, however, have been peculiarly limited to physical and sociological metaphors with

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a few very simple concepts from general psychology. Prince, on the other hand, has made wide use of the conceptions of general psychology and physiology; holding "that these principles or tendencies govern the normal functioning of the psychonervous system, and that it is the perversion of these tendencies which constitutes functional disease . . . reactions which misadapt the individual to his environment and which result from normal functioning under conditions to which the individual is not adapted. . . . Conversely," as the section which follows will indicate, "psychotherapy makes use of these same principles or tendencies to re-adapt the individual to his environment, to re-educate him to healthy reactions." ⁸²

X

THE BASIS OF PSYCHOTHERAPY

IN his ideas on therapy, we have at once the application and the test of Prince's general approach to the functional disorders. For, as it happens, his language with regard to therapy is so clear and analytic as really to describe what he does in practice; an accomplishment which, were it more generally shared by practitioners of other schools of thought, would automatically straighten out some tangles in theory, differing so widely as that theory often does from the actual course of treatment. Real consideration of the theory of therapy, therefore, would seem to offer more mutual understanding between workers, as well as individual understanding in technique.

From the fact that Prince grants full place to organic as distinguished from functional disorders, it follows that he would by no means limit therapy to psychotherapy; though the present discussion will have to be limited to psychotherapy. And from the fact that psychological processes are bound up with neural processes, it follows similarly that psychotherapy is itself understandable in neural

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terms. Thus it was remarked in the preceding section that dissociations as well as "association neuroses," or "habit neuroses," may be regarded as in a certain sense matters of habit. This is because the elements between which the dissociation occurs are themselves bound up into their several groups by strong association or habit; and the dissociation or break itself is tolerated habitually by the individual. As, too, a break between associations represents only a relative weakness in association, a lack of normal habitual connection between disjoined elements, this is a point of opportunity for the psychotherapist: where there is dissociation, he must re-associate, re-channel neurograms; where there is wrong association, he must make new associations, open up other neurograms (effect improved synaptic connections). In short, as remarked before, psychotherapy is essentially a process of "re-adapting the individual to his environment," through "re-educating him to healthy reactions." This is the gist of psychotherapy.

But it by no means conveys the specific principles, methods, and clarifying psychological statements, which are essential to the present account. What, for instance, of that ancient method, hypnosis? And what of "abreaction" or "catharsis," "transfer," dream analysis, psychoanalysis generally as contrasted with suggestion, and "sublimation," as thought of today? These are pertinent questions,

and questions which we may well consider in the light of what follows.

We spoke of re-association, repair of breaks in the personality where there is dissociation. This formulation is most noticeable in Prince's earlier writings, where he was most concerned with the phenomena of multiple personality, hysteria, and "the subconscious." As expressed in an article with Sidis in 1904, once the experimental *sources* of a "recurrent psychopathic state" as dissociated have been traced, "it is possible to bring about a cure by synthesizing the dissociated mental states with the waking consciousness; or, in popular language, to make the mind whole once more. For this purpose the dissociated lost memories are brought into the full light of the waking consciousness, which is thus made to have a complete knowledge of them. So long as normal associations are maintained between the *lost memories* (or mental states) and the normal mental life, the system which before was dissociated can no longer be thrown into independent activity, and the train of symptoms to which that activity gave rise can no longer appear"; a conclusion which practise with such cases, and observation of the permanence of their cure, abundantly justified.⁸³

Yet this formulation cannot, on the basis of Prince's theory as a whole, be taken to cover all cases; nor does it answer a number of the important

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questions that have been raised about this theory in practise. It should indicate, however, that so far from being "only a hypnotic suggestionist," Prince has *always* been an analyst first. This analytic procedure is indeed implicit in all studies that have been made of the operation of subconscious processes, whether induced hypnotically or otherwise. It is a commonplace that hypnotic suggestions for which there is amnesia in the waking state tend to combine subconsciously with elements normally associated with them, and to persistently or intermittently affect the emotional tone and even the thoughts and actions of consciousness, until through either artificial or natural means those subconscious complexes (for such they really are) are broken up or modified. And it is equally well established that the attitudes launched in dreams often persist in the same way, resulting in otherwise inexplicable moods, pains, paralyses, tics, or obsessions of various kinds. Distressing or pleasurable but incompatible memories for which there is amnesia have long been known to project similar symptoms, and to yield, like the post-hypnotic suggestions, to the same sort of discovery and re-adjustment.⁸⁴ It would have been remarkable, therefore, if Prince had not proceeded regularly with analysis in mind.

As he put it in his earliest publication on functional disorders (1890, when, however, he also used electricity), "the practical corollary from this theory

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is that in a large class of neuroses we are to look for their causes . . . in a pathological association of normal anatomical elements, and the treatment is to be directed to the breaking up of this association, and the re-grouping of the nervous centers." More specifically (in 1898), "the preliminary step in the treatment is the study of the origin, history, and groupings of individual symptoms. It is surprising to find, after a searching enquiry which involves every detail concerning the origin and character of the symptoms, and the conditions under which they arise, how often what seems to be a mere chaos of unrelated mental and physical phenomena will resolve itself into a series of logical events, and law and order be found to underlie the symptomatic tangle. . . . After unravelling the symptoms in this way it will be surprising to find how much facilitated will be the removal of them." Still later (1910), "it is needless to insist that a preliminary psychoanalysis is, as always in psychotherapy, a prerequisite procedure." And that such analytic re-association and re-education have been used with effect by Prince, is evident from his long series of published cases, including such varieties as "hysterical joints," extreme stage fright, sex perversions, kleptomanias, phobias and obsessions generally, and multiple personality.⁸⁵

True, from Prince's view of the genesis and types of functional disorders, "there are theoretically two

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ways in which an obsession might be corrected. 1. A new setting with strong affects may be artificially created [directly, without any deep analysis] so that the [conscious] perception acquires another equally strong meaning and interest. 2. The second way theoretically would be to bring into consciousness the setting and the past experiences of which the setting is a *sifted* residuum, and reform it by introducing new elements, including new emotions and feelings. In this way the old setting and point of view would become transformed and a new point of view substituted which would give a new meaning to the perception." In other words, and practise justifies the assumption, for some obsessions in which no marked dissociation exists, direct suggestion or persuasion is fully adequate; while for those disorders in which the mis-associations involve real breaks and independence from consciousness, deeper analysis is demanded.⁸⁶ Yet in either case the therapeutic procedure is first to find out *what* response patterns are out of order, and then to re-align those patterns through enforcing new linkages between the elements which need new linkages. The question of method, therefore, should be a matter of recognizing differences in disorders, without making a panacea either of deep analysis or of (analytic) suggestion.

But if, as was stated, all psychotherapy reduces to re-education, what parts in the total process are

filled by suggestion and analysis, respectively? Suggestion is certainly a form of education; suggestion means the formation of associations, or it means nothing. On the other hand, since surface suggestion is known to be useless, or of only temporary value for many sorts of functional disorder, must it then be that analysis involves fundamental psychological processes of a different character? To be specific, what of "catharsis" and "sublimation"?

"Catharsis" has indeed been urged by psychoanalytic writers as a method based upon more insight and producing better results than any variety of suggestion. For "catharsis"—to repeat a discussion published elsewhere⁸⁷—the patient is induced to revive (in the etymological sense) any "repressed" emotion so as to give that old emotion expression (in the sense of outlet). This has been taken to mean "emotional catharsis of dammed-up *libido*." It is only fair to Dr. Freud, whose name has been the most important one associated with this doctrine, to say that in his later writings, he has emphasized rather the "bringing of submerged memories to the light of the waking consciousness"; which, however frequently involved in the method of "catharsis" as practised today, is psychologically a distinct process. Indeed, the reason Freud has so shifted his emphasis is simply because "catharsis," in the restricted sense of merely draining off "old pent-up emotion," cannot of itself be depended

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upon to effect any cure at all, as the Freudians early observed. Prince would go farther, on the basis of experience as well as of theoretical considerations, and would maintain that "catharsis," though often helpful, is not even necessary to a cure; for "catharsis" in its own right is *not* the essentially curative process it has been taken to be. The reasons for this view will be indicated after a word about the newer development.

The method of "bringing to the light of day," or recall to consciousness, as a method of psychotherapy, we find, has been followed by such good results that the literature now abounds with cases where such recall has been followed by recovery. Especially important, it would seem, are those instances in which the cure followed a recall which was spontaneous or accidental, without the ministrations of a physician. An example would be an individual who fears open places until, upon going back to his boyhood home, he is reminded of what it was that originally frightened him there; and after recollecting this, he fears no more. The surprising recoveries that occur when amnesias are repaired with the help of a psychotherapist likewise seem highly convincing. But in Prince's view, these undoubted recoveries only explain the misconception which, again, has grown up about the therapeutic value of recall-as-such. Too many have jumped to the conclusion that waking recall, "making the un-

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conscious conscious," is the *sine qua non* of effective psychotherapy. Prince recognizes fully the fact that waking recall is a highly useful process; and he agrees that as compared with superficial (even hypnotic) suggestion-without-analysis, waking recall is infinitely to be preferred. But it by no means follows, in his opinion, that waking recall by itself is the complete, or even the absolutely necessary, process in bringing about a cure.

The grounds for thus denying the magical effect of "catharsis" and of "bringing to the light of day" lie partly in the absurdities to which these conceptions themselves lead. Most of us have met persons who have drawn the inference from Freudian terminology that, from the point of view of "catharsis," free emotional expression at all times would truly relieve all the tensions of the soul. A few authors have published their convictions that for the sake of the nerves of the nation a very much less "repressed" society is badly needed; a happy picture which in the precise form presented by these writers, at least, hardly squares with the psychiatrist's observations of the alleged health and happiness of the "totally uninhibited"—wretchedly unintegrated—individual.

The way in which the notion of mere bringing into consciousness proves misleading, may be indicated by this query from a student of economics: "I would like to ask," he writes, "what the psy-

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chologists would have us do to cure our prejudices. I have heard some say that the correct thing to do is to trot them out and think about them, and perhaps exercise them consciously. That seems to me to be a dangerous proceeding, as likely to start a habit. Of course, merely recognizing a prejudice will not start a habit, but what good would mere recognition of a conflict or prejudice do in solving the conflict or removing the cause of the prejudice?" The answer which both popular and scientific psychology would give is, of course, that the principle of habit formation has not been superseded as yet, and is not likely to be superseded. And in fact there is excellent experimental evidence to prove that *mere* "bringing up to full consciousness," like *mere* "emotional catharsis," never cures any prejudice or any neurosis. The cures that do result when these practises are professedly engaged in, result from the fortunate incidental fact that in the process, in the confusion of burning down the house to roast the pig, the beast's organization gets changed: in leading the patient to recover his "submerged affects" and memories of associated experiences, interesting him in the problems of his dreams, etc., he is led to, or hits upon, new linkages, new associations, for his old memories; and as the sources of conflict thus are seen in the light of the new knowledge, they acquire a different meaning, and accordingly are made innocuous. But this is really the

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process of re-education; and it is Prince's conclusion that the essential process in psychotherapy is re-education.

For example: A woman of about forty years of age is seized with fear and anguish whenever she sees a church steeple or tower of any kind. The patient cannot remember the origin of the fear, when it had originated, nor understand why she is afraid. It is all a mystery. "Free association" by psychoanalysis reveals nothing either in the waking state or hypnosis. Finally, by securing automatic writing in hypnosis, Prince recovers for her a memory of a girlhood experience which was the origin of the fear. This experience related to the circumstances of her mother's illness, subsequent operation and death, during which time the girl went to church daily to pray for her mother's recovery, and cried constantly. At the same time the church bells were ringing and got on her nerves and she "hated them." During the automatic writing, though she is totally unaware of its contents, she exhibits intense mental and physical anguish, and tears roll down her cheeks. After waking, on being shown the writing, she remembers all the incidents referred to, and further narrates in detail an earlier act of disobedience as a child and the way it led to her mother's death, of which, as she believes in consequence, she was the cause. But now she realizes, what she did not know before, that the

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real object of the fear is the ringing of bells in steeples and towers and that this fear dates from the episode described by the automatic writing. She blames herself for her mother's death which occurred, as she believes, as a definite consequence of her disobedience when a child.

No argument or reasoning on Prince's part has the slightest effect in changing this false belief or relieving the phobia, nor does bringing facts to the full light of consciousness alter them. But when the patient is led to recall and connect a lot of other facts (not forgotten) in her mother's life that give *a new understanding, an entirely different point of view*, she suddenly and dramatically sees for herself that her disobedience had nothing to do with her mother's death. This new point of view is at once accepted. She no longer blames herself and she is as suddenly, and permanently, cured.⁸⁷

The same principle, re-education, is beautifully demonstrated by recalling the shocking memories to the mind of a patient who is under hypnosis, and then recalling the reinterpreting memories and establishing a sounder point of view, giving a new meaning to the buried experiences, all while the patient is hypnotized, and without having those memories brought into the waking consciousness at all. The cure results just the same.

Again, the same principle appears to explain those cases in which a patient is made worse by psycho-

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analytic efforts. In such instances, the Freudians speak of "incomplete analysis." But would it not seem most reasonable to regard those exacerbations as the natural result of *practising* the emotional tones of bad memories in the process of recognizing them?

For in this connection it should be acknowledged that to encourage emotional expression during analysis seems to help the recall of memories, if only because such emotion is associated with the memories in the mind of the patient; the recall of memories being effected, as already remarked, to find out on what points the patient needs re-education. This is indeed to admit that there is much that is sound in the *procedure*, as contrasted with the *theory*, of the contemporary psychoanalysts. But restatement should free those elements of truth from the misleading implications of the current doctrines. And such restatement, it is proposed, Prince has provided; he has defined the real substance of psychotherapy, so as to enable us to see, for example, that "when cure results from 'bringing to full light of day' it is because the subject with this knowledge in hand modifies the setting of himself." ⁸⁷

In sum, psychotherapy is re-education; analysis shows where the re-education is needed; suggestion is one form of education and even of re-education, though an admittedly superficial form if applied unanalytically; "catharsis" is often helpful, but not

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essential to a cure; "bringing to the light of day" is often most helpful, yet is not essential to a cure; but "*re-setting,*" *re-education*, which *can* occur without either "catharsis" or bringing to full waking consciousness, is the essential process.

XI

SPECIAL METHODS IN PSYCHOTHERAPY

TURNING to the special means by which psychotherapy is effected, we may note at the outset certain observations Prince makes concerning current psychoanalytic procedures.

In the first place, with regard to word-association as a method of detecting "submerged complexes," while admitting the great value of the procedure, Prince points out that "we ought not, however, to be too sweeping in our generalizations and go further than the facts warrant. We are not justified in concluding that the linking of an affect to an idea always includes a subconscious mechanism. On the contrary, as I have previously said, probably in the great majority of such experiences, aside from obsessions, no such mechanism is required to explain the facts. . . . It is quite possible, if not extremely probable, that in the simpler types, at least, of the emotional complexes, the association between the idea and affect become so firmly established that the conscious idea alone, without the coöperation of a subconscious process, is sufficient to awake the emotion; just as in Pawlow's dogs the artificially

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formed association between a tactile stimulus and the salivary glands is sufficient to excite the glands to activity, or as in human beings the idea of a ship by pure association may determine fear and nausea, the sound of running water by the force of association may excite the bladder reflex, or an ocular stimulus the so-called hay fever complex. So in word-association reactions, when a word is accompanied by an affect-reaction the word itself may be sufficient to excite the reaction without assuming that 'an unconscious complex has been struck.' The total mechanism of the process we are investigating must be determined in each case for itself." ⁸⁸

Again, with regard to data obtained by the method of "free association," a degree of caution is urged. Strictly speaking, "it is debatable as to whether there is such a thing as free association, free from the influence of the environment, the investigator, etc., as a (very important) determinant." And evidence for this influence is not lacking. Most striking is the report of the same case as studied independently by Putnam and by Prince, "each making his study from his own point of view, without consultation with the other. . . . Not the least interesting point, which becomes apparent from a study of these two reports, is the different kinds of facts elicited by the two studies—which would seem bound to be the case when two persons influenced by different

theories examine the same patient. Herein probably also is to be found the basis for much of the divergence of views in psychopathology.”⁸⁹

We may note, too, Prince’s interpretation of the conventional psychoanalytic attitude with reference to the use of hypnosis. Freud’s conception of the nature of hypnosis remains surprisingly metaphysical, involving the conception of the “transfer” and “fixation” of *libido*, much as Mesmer believed in the existence of magnetism. And notwithstanding his rather recent admission of the usefulness of hypnosis in war cases, Freud’s conception of hypnosis from the point of view of the observable phenomena is similarly naïve, in that apparently he fails altogether to appreciate the relativity or varieties of stages of hypnosis, the significant differences in the ways of inducing hypnosis, the psychological mechanisms actually involved, and the different modes of using hypnotic conditions therapeutically. This failure to understand the processes of hypnosis is evidenced particularly in the fact that a great many of Freud’s patients when relaxed for psychoanalysis must be literally in a hypnotic state, a fact which the Freudians seem to overlook just because of their doctrinal prejudices and erroneous assumptions as to what hypnosis implies.

Hypnosis should not be assumed, for example, to involve amnesia upon returning from the hypnotic condition to full consciousness. Amnesia, like any

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other hypnotic or post-hypnotic possibility, will or will not occur, frequently according to the specific suggestions which verbally or otherwise befall the patient. Hence mere continuity of consciousness before, during, and after a period of analysis, is no proof that hypnosis did not exist there. The present writer has enjoyed the experience of arguing with a professor of psychology who stoutly maintained that, as he remembered everything—his own conversation, noises in the hall, etc.—that had happened during the “hypnosis” just gone through with, therefore he had not been hypnotized; an argument upon which this subject insisted until he accidentally discovered that he could not unlock his folded hands—the one post-hypnotic suggestion for which amnesia had been prescribed a few moments before. And that this condition actually obtains in many an analysis, is indicated in another incident: a psychologist acquaintance who had never tried to hypnotize anybody, upon being consulted by a young woman for a neurotic reaction, asked her as usual to relax in an easy chair and let her mind play over the sources of her trouble. Seeming to have struck a good “lead,” upon an impulse he asked her if she would not like to “go to sleep” so as to get back to more remote memories. His surprise may be imagined as she replied, “I *am* asleep.” “How are you asleep?” “Why, I can’t open my eyes.”⁹⁰

Clearly the question of hypnosis as a method in

psychotherapy cannot be discussed without some understanding of what it is and how it works. This does not mean that the inmost mechanics of hypnosis are known, any more than the inmost mechanics of sleep are known. But it does mean that we should comprehend hypnosis psychologically, descriptively instead of metaphysically. And when we do so comprehend it, we are able to recognize hypnosis in its many gradations as a condition of "dissociation and re-synthesis" in which *either* of these processes may preponderate. Indeed, one reason why many students and practitioners do not realize the characteristics of hypnosis is just this, that they think of hypnosis as only *dissociation*. Actually, the *integrating* process which also occurs in hypnosis is fully as significant. Otherwise it would seem quite impossible to explain such facts as that in many cases of hysteria the hypnotic personality is more normal, in the sense of freedom from amnesias and anesthetics and the like, than is the waking personality; to hypnotize these cases is immediately to recover the lost functions (for the time being); a great many persons, in certain states of hypnosis, can recall with ease memories which they were unable to get back in the waking state; and normal persons are often able, when in a condition of abstraction, to experience about a given topic a flood of little memories that were unknown to them when awake. It is these frequently observed character-

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istics of hypnosis that make it useful, in Prince's opinion, for some types of disorder.⁹¹

"For example," as Prince describes a case, "there are two secondary personalities, *A* and *B*, each with distinct traits, distinct memories, distinct sentiments, distinct instincts, emotions, etc.—entirely different personalities. Now I hypnotize *A* and get a hypnotic state, which is essentially the same in all its traits as the waking state *A*, but a passive dissociated state characteristic of a moderately deep state of hypnotism. Then I hypnotize *B* in the same way, using in both cases simply the formula 'sleep,' and obtain a dissociated state identical in traits with *B*. As with *A*, it is *B* hypnotized. Now in each case I go on further and say 'Sleep deeper, deeper,' nothing more than that. What happens? Both hypnotic *A* and *B* change to one and the same hypnotic state *C*, which has all of the traits of *A* and *B* combined, integrated. I only said to both *A* and *B*, 'Sleep deeper,' and yet the process was one of integration, not dissociation, resulting in one and the same state which is the whole personality, hypnotized. Then all I had to do was to awaken this one (*C*), and I obtained the total integrated personality, a combination of the two; I had integrated them by the hypnotizing formula 'sleep.'

"The principle of integration is likewise illustrated by the two cases of Jules Janet. In one case there was hysterical vomiting so severe as to

threaten the life of his patient; she also had chorea. Now, Janet merely hypnotized that person, told her to sleep. She went into a different state and became normal and free from vomiting and other symptoms. It was mistaken by Jules Janet for an hypnotic state. But it was not. It was the normal personality. By the process of hypnotizing, he integrated that personality." Incidentally, because "‘hypnotism’ has always been treated as if it were something bizarre, a mental condition that stood apart as something distinctly different from all other conditions (whereas it is only one of a large category of conditions characterized by alteration of the personality)," Prince has proposed lately that the term "hypnotism" be discarded in favor of, say, "suggestive depersonalization and repersonalization."⁹²

(The fact that Prince thus conceives hypnosis in a psychological manner, as contrasted with popular and Freudian fashions, suggests a point brought out in the following query to Prince from the present writer: "As you know, many Freudians believe that the recall of submerged memories and the wholesome dissolution of all resistance to the psychotherapy can be accomplished best by getting the patient to 'transfer' some of his real *libido* over on to, falling more or less actually in love with, his physician. You, however, have had cases of 'resistance' galore [and some of which have been very amusing]. Have you ever found it necessary to

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inhibit the resistance and to facilitate the recall and cure by drawing the patient's *libido* you-wards?" The reply is: "No, never. Like every physician I have had patients develop an idealism, or, frankly stated, an affection for the physician but this I have always considered a handicap and to be avoided. Of all the obstacles to effective treatment I consider this one of the greatest and (as I have, I believe, seen) failure of treatment is often due to it. My rule, therefore, is keep yourself as detached as possible—your relation to the patient impersonal." As stated by Prince in the earlier years of his practise, "The attitude of the physician should be largely that of the trainer to the athlete. He is to teach the patient how to help himself.")⁹³

But hypnosis is by no means the only method of recovering dissociated memories. Prince employs a number of other means (means which will seem weird and occult only to readers who are not familiar with the phenomena, and the principles as thus far made out, of abnormal psychology). Prince employs, as other instruments for the recovery of needed memories, "free association" with the patient in various degrees of abstraction or hypnosis as well as "waking"; "word-association," similarly; dream analysis; crystal and other artificial visions; automatic writing, with the patient either awake or hypnotized; other automatic actions and symptoms, as occurring variously; and combinations of these

different methods. The particular method employed in any case is determined by its success in "tapping" the subconscious memories in question.⁹⁴

Yet whatever the tactics employed in recovering the memories, the explicit aim of the investigation is neither to "bring to the light of day" merely nor to provide an emotional outlet: the aim is, as indicated already, to discover just what the memories are that must be readjusted, what the linkages are that must be changed. The real task then is to *change* them, or to change the subject's point of view with regard to them; and this is the real crux of the therapeutic problem. For obviously, to realign dissociated or incompatible elements is actually the same thing as to adjust the conflicts between them: to work out their conflicts is to change the settings of the elements, to allow them automatically to come into one organization, to integrate the personality for meeting the problems of life.

And naturally, "this is not a simple procedure, but an art. It often requires all the skill which can be acquired from a knowledge of human nature, of life, the data of abnormal psychology, and, above all, from a recognition of the principles above formulated. The point of view, the attitude of mind, the beliefs, the habits of thought, must be modified by the introduction of new points of view, of data previously unknown to the patient and drawn from

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the wider experience of the physician; by instruction in the meaning of symptoms and in their organization and causes; by the suggestion of expectations that may justly be fulfilled; of ambitions that ought rightfully to be entertained; of duties to be assumed but too long neglected; of confidence and hope; and, above all, by the suggestion of the emotion of joy that goes with success and a roseate vista of a new life. There is no fact of life that does not have more than one aspect, . . . no conduct that does not have more than one relation. Thus the old systems of ideas carrying with them apprehensions, anxieties, and depressive emotions are modified by being interwoven with new ones, and new systems of ideas or complexes are artfully created and substituted for the old. These systems should be such as will stimulate healthy reactions of the body in place of unhealthy perverted reactions. Finally the whole complex, by repetition, emphasis, and the stimulation of emotion, is firmly linked and organized until it becomes conserved as unconscious brain residua and a part of the individual's personality. If thus conserved it will be reproduced whenever stimulated." ⁹⁵

Considering the various degrees of synthesis and dissociation which are possible for a personality, and in view of the root principle of psychotherapy as sketched, it is evident that this process of "organization and substitution of healthy complexes in

place of the unhealthy ones" can occur either in waking consciousness or in some hypnotic condition; provided the new point of view which the subject acquires is linked correctly with, not his consciousness necessarily, but with the distorted patterns which had been causing the trouble. (It was of course the failure of the old-fashioned suggestionists to effect this necessary integration, which resulted in the shelving of their methods for the more analytic modern technique; and it was the devotion of the older suggestionists to the use of hypnosis which resulted in the common misconception that a psychotherapist who uses hypnosis must be "only a suggestionist.") "As a matter of fact hypnosis is only necessary in a small minority of cases. In obstinate cases," however, "hypnosis has the advantage that, suggestibility being increased and antagonistic ideas being dissociated or inhibited, the new ideas are more readily accepted and the complexes more easily and firmly organized": a statement which is certainly not intended to mean *all* "obstinate cases" including the ones which as Freud and others have shown do not yield to the hypnotic approach.⁹⁶

Thus Prince reduces several of the popular psychotherapeutic methods to a common psychological principle. There remains one other supposed method of personality adjustment, namely, "sublimation." As for sublimation—well, just what does that term

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mean? It is supposed to mean the direction of the individual's life-force, or *libido*, into benign channels of interest and activity. Yet neither the psychologists nor the physiologists have been able to discover any free, floating *libido* or other *élan vital* of the metaphysicians; though the metaphysical convenience of such a conception for describing a variety of phenomena is admitted. Diversion of *attention*, on the other hand, *inhibition*, *re-conditioning* or re-association and the *development* of interests, are really comprehensible (and for that matter comprehensive) terms, indicative of processes that undoubtedly occur constantly and usefully, as all the foregoing account connotes. So "sublimation," too, is deserving of reduction to more psychological (less misleading) language.⁹⁷

"All this therapeutic procedure of course means the education, or perhaps better, the re-education, of the patient. It is the same process that in Pawlow's dogs led to the secretion of gastric juice and saliva by educated reactions to the environment, and in hay fever neurotics to the creation of the coryza complex as a perverted reaction to mental and physical stimuli. . . . The therapeutic process is the association through education of healthy ideas and stimuli that adapt the individual to his environment."⁹⁸

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COMPARED with the range of observations and hypotheses (and speculations) that compose the psychopathology which prevails today, Prince's system presents a number of deficiencies. The rôle of infantile sexual interests as observed by Freud, and the over-close attachments between child and parent or other persons, with the conflicts and morbid phenomena resulting, have not been touched by Prince. Possibly this omission was owing originally to the fact that the meaning of the subtle attachments of childish sexuality escaped Prince's notice in his preoccupation with other and perhaps equally subtle and important factors. Prince, however, is convinced that the Freudian emphasis here is not justified by the facts. That "infantile sexual interests," "Œdipus fixations," and the like, do occur, he admits; and that in individual cases these interests may result in morbid conditions, is clear enough. But "Freud's error is in generalization which undertakes to refer all morbid phenomena to this infantile '*libido*.'" As Prince sees it, since the development of the Freudian movement the interests of eroticism have been overworked, often to the extent of un-

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desirable suggestion and serious neglect of fundamentals. Still, many will feel that on this point the observations of Freud and his followers, when interpreted with due scientific caution, mark a significant contribution to our understanding of the biological roots of human behavior.⁹⁹

The concepts of defense reaction and compensation, similarly, have not been developed by Prince. Much that these terms have been made to connote by Adler has been implied in Prince's treatment of the developing and variously conflicting urges and interests of the organism; and of course in every-day life defense reactions in the form of fits of anger, offensive behavior, assumptions of superiority, braggadocio, subterfuges, falsifications, and the like, more or less wittingly or unwittingly motivated, are of common knowledge, and need no probing of the subconscious to be recognized. The fact also that many neuroses are defensory in character has long been known. As Prince observes, "The neurasthenic who gets up a headache whenever she doesn't want to fulfil any obligation and all such patients who make use of their symptoms to escape their getting well lest they might be obliged to take up their duties have played a large part in medical practise."

It does not follow, however, in his opinion, that the morbid phenomena were set up in the first place by the defensory plans of a subconscious intelligence

(as is often assumed). In the great majority of cases of "shell-shock" and of civilian "traumatic neuroses," Prince writes, "I believe the symptoms are not *originally induced* as defense reactions, but they are *maintained* as such in order to obtain damages in, for example, railway accidents. They first appear after a short period of incubation during which a concept (belief, with fear) of irreparable injury develops often due to the suggestions of the physician." In this connection, too, Prince emphasizes his theory of "meaning" in explanation of the patient's "injury." "Defense reactions induced *primarily* by subconscious processes may be easily demonstrated experimentally in suitable cases, such as the Beauchamp case. But it is a far cry from these instances to the generalization that subconscious purpose is the primary agent as the basis of a psychology. For this reason I have not emphasized defense reactions apart from other categories."

In connection with other categories, Prince uses the term defense reaction in speaking of an individual's display of anger against personal criticism or attack. Similarly, in his study of the *Psychology of the Kaiser*, Prince emphasizes the defensory character of the arrogance which the Kaiser displayed when any of his subjects doubted the divinity of his rights. No account is taken, however, of the Kaiser's withered arm as a stimulus to compensatory domination. True, that study was avowedly

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limited to only a few aspects of the Kaiser's personality. But it illustrates the fact that Prince has made no extended special use of the ideas of defense reaction and compensation.¹⁰⁰

Again, the processes of rationalization (Jones, after Bernheim, Freud, and others), the "lapses" of every-day life (Freud), and the effort to distinguish personality "types" (Jung), have not been featured by Prince; though toward all of these questions he has contributed a great variety of observations. Regression, as put forward by Jung, might be mentioned as another idea Prince has not developed to any great extent, at least not in the same way; though Prince's frequent use of the term "reversion," with his studies of childish personalities such as Sally Beauchamp and B, and of quietistic ones like The Saint, are not without importance for the broader (not merely sexual) understanding of regression.¹⁰¹

In Prince's working out of his own ideas, human limitations can be found. While his analyses of living cases seem to have been remarkably acute, and his thought about the material gleaned, very vigorous, the theoretical conceptions resulting do not appear to have been relentlessly thought out in every instance. The present writer, for example, would like to see a definite, though not always sharp, distinction made between sentiments and complexes; more recognition of differences between conflict, dis-

sociation, and various types of inhibition; a considerable clarification of the conception of the subconscious, incorporating a difference urged by Freud, as worked out by Harold E. Pressey; and more constant explicitness on the problem of urges in the organism.¹⁰²

In form of exposition, too, Prince's writings have not been all that might be desired. The *Dissociation of a Personality*, *Psychotherapeutics*, and a number of articles in periodicals, were very clearly written; but in much of his later work, the labor necessary to careful formulation appears to have been diverted partly into more exploratory channels, quite possibly with profit to the latter. These, however, are weaknesses native to the race; and we should seek "neither to praise nor to blame men, but to understand." For a field rich but undeveloped, and relative to which inadequate and anthropomorphic conceptions are current, the task of exposition must necessarily be difficult. And it may well be that the somewhat unfinished character of a number of Prince's conceptions is inevitable, considering their closeness to the original data. Technical precision of formulation comes usually with the buffeting of conceptions between many critical minds.

Such are the more apparent deficiencies in Prince's view and its presentation. The positive contributions of our author, however, are much more striking and important; and to these positive contribu-

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tions we now turn. We may attempt to evaluate them somewhat critically, first in historical perspective and then as a logical and scientific product.

Historically, Prince's views show a significant course of development. From the master Charcot, who taught Janet and Freud also, Prince learned of the psychogenic character of hysteria, and of the reality of the phenomena of hypnosis. From the school of Liébeault and Bernheim, he acquired the conception of hypnosis as an essentially natural, non-pathological condition, even though artificially induced. From Gurney's studies of dissociated subconscious processes set up in normal individuals by hypnotic methods, and from Janet's brilliant researches in hysteria with his development of the theory of the subconscious, very important ideas were gained, particularly as to the actual occurrence of subconscious processes under some conditions. From Janet also came the view of the rôle of emotional strain and weakness in the genesis of what are now called psychoneuroses. Thus from various sources at the outset came important materials, and with them questions about additional phenomena and explanatory principles.¹⁰³

Prince's studies on hypnotism and subconscious phenomena, begun thus about 1888, continued with his cases in Boston. As he puts it, "I remember well how, after graduation and I had hung out my 'shingle' and entered upon general practice, I expected

that it would be patients with organic diseases, diseases of the heart, lungs and kidneys, typhoids and other infectious fevers, etc., that would ring my door bell or send their calls in urgency. It was only gradually that it dawned upon me that these were but a small part of the ills for which a physician's services are needed; and I found that it was the functional disturbances of a minor and major character that to an equal extent at least with organic diseases incapacitated poor humanity from 'carrying on' and which I was called upon to rectify." These cases provided Prince with materials for his papers on psychogenic disorders, papers which began to appear in 1889.¹⁰⁴

In the meantime, William James published his observations on automatic writing (1889); somewhat later Boris Sidis worked out his *Psychology of Suggestion* (1898) and his psychopathological views; and E. W. Taylor was manifesting a sympathetic attitude to the new developments in this country as well as to those abroad (Gurney, Janet, Binet, Dessoir, Breuer and Freud). With Sidis' coming from New York to Boston, and with Isador H. Coriat, John E. Donley, and G. A. Waterman in Boston actively interested in the new understanding of functional disorders, it seemed for a time that a sort of "school" might become recognizable in the Boston group. This development was aborted, however, by the growth of the movement sponsored by Freud.

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The entrance of the Freudian views was marked by a period of amusing resistances, reactions, and allegiances. James J. Putnam was one of the first Boston neurologists to join the new movement. Later Coriat went over to it from the special group mentioned previously. Of interest in this period were Prince's founding of the American Psychopathological Association and the *Journal of Abnormal Psychology*; the subsequent capture of the Psychopathological Association, in large part, apparently, by the Freudians; Sidis' profound disappointment, which he often expressed to Prince, over the turn affairs had taken; Prince's appointment to the chair of neurology at Tufts Medical School, where for ten years (1902-1912) he gave a course devoted especially to the psychoneuroses, phenomena of the subconscious, and abnormal psychology generally; his repetition of some of these lectures at the University of California (1910), previous to their modification and elaboration in the published volume, *The Unconscious* (1914, 1921).

Prince's investigations and the development of his conceptions continued throughout these years. At first, his interest was largely in problems of the subconscious, hypnosis, the psychoneuroses, hysteria and multiple personality (approximately 1887-1900). Then he became more occupied with the organization of native and acquired reactions into complexes, systems, etc., the part played by sub-

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conscious processes in normal and abnormal behavior, the dynamics of obsessively recurrent states, dreams and hallucinations, the practical nature of meanings or settings of ideas, and the application of these principles to psychotherapeutics (about 1900-1909). These interests led naturally into the general problems of personality organization (1912 *et seq.*), involving, as also during the preceding series of studies, consideration of the contributions of Freud as related to these problems.¹⁰⁵

Freud has played, as a matter of fact, a very important part in the development of Prince's views. Prince mentions him frequently, and always apparently with understanding of what Freud has in mind. Often, of course, these references to Freud are made with a difference of opinion as to the theory involved. Not infrequently, however, Prince speaks of Freud with approval. He does complain that "one of the most astounding things in the Freudian philosophy is that it either totally disregards everything that has been written by capable students of psychology upon the emotions, or, when it recognizes these important innate dispositions, it does so in a most superficial and inadequate way and subordinates them all to the use of one instinct, the sexual. . . . One hardly knows whether to ascribe this attitude on the part of psychoanalysts to an amazing ignorance of psychology or to that Freudian mechanism which represses from consciousness disagree-

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able and intolerable facts. The Freudian conception may be right or it may be wrong, but in either case, to dismiss without discussion well-known facts and plausible interpretation . . . is not calculated to render Freudian interpretations acceptable to those who have a wider or different culture. . . . Considerable complaint is made (and with justice) by psychoanalysts that their critics have not made themselves acquainted with Freudian data and conceptions. Is not the boot on the other leg, or at least on both legs?" ¹⁰⁶

Prince's real attitude toward Freud seems closely akin to his attitude toward McDougall. As Prince writes, "I think that perhaps in my desire to give full credit to McDougall I overestimated or overemphasized my agreement with his conceptions. Still, I do think, as I have often said, that McDougall has made important contributions, and, more particularly, has had a great influence in directing thought and attention to this whole problem of the instincts. . . . To study a problem from a new approach is a difficult job, and if one doesn't believe it let him try it himself. I think that the same influence in a dynamic field was Freud's great achievement and he deserved great credit for it. No one else could have done in this respect what he has done." ¹⁰⁷

Probably the greatest influence of Freud upon Prince has been in the development of the latter's

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emphasis on conflict, unless, indeed, it be in Prince's reaction aiming to broaden the field of pathogenic factors beyond the Freudian preoccupation with eroticism. But with reference to the origin of his conception of conflict, Prince's first reply to a query on this point was that he thought he owed it to Freud. Then, "since writing yesterday . . . certain memories come back to me. As I wrote you, I think the first idea of conflict was put into my mind by Breuer and Freud's theory of repression, but I think that I remember that the specific concept and general principles of conflict came to me during the course of the Beauchamp case. I remember that during these studies example after example of conflict under more or less experimental conditions came to light and these forced the concept upon me as I finally developed it. I remember well, when Ernest Jones announced that he was coming to this country to expound Freud's psychology, that I told James Putnam I would teach Jones about conflicts and show him examples such as he knew nothing of. Many memories of this kind now come floating into my mind." ¹⁰⁸

As for difference between Prince's and Freud's views, a most striking point is in the conception of *libido*. For Freud, as is well known, the *libido* is a basic, moving, ramifying, and essentially libidinous urge, the fortunes of which constitute the substance of life, liberty, and the pursuit of happiness. Prince

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finds likewise a state of interplay between the psychological factors and the environment of an individual; only, without denying their biological evolution, he finds *more* psychological factors; and he hopes to describe them more psychologically. To his mind the Freudian *libido* is a pre-scientific, metaphysical conception, somewhat on a par with Mesmer's "magnetism," only biologized a bit; and Prince wonders rather seriously whether the prominent Freudian with whom he took a walk on one occasion, and who pointed out "sexual symbolism" in every variety of architecture they saw, could not be taken as the prototype of paranoia. Yet all this "resistance" does not prove that Prince has a Freudian complex, any more than Freud's failure to champion Prince's system proves that Freud has a Principian complex. As a matter of fact Prince has studied and adjusted cases of sex aberration; and he maintains throughout a fully naturalistic and appreciative, though ethical, attitude toward the sex interest. For him, "the '*libido*' is the integral affective factor in the sexual instinct (or appetite)." ¹⁰⁹

What Freud explains through early complications of the *libido*, Prince explains through accumulations of *meanings*. In Prince's views, as we have seen, it is the particular experiences clustered about any point of difficulty in an individual's life that have to be traced; and psychotherapeutically it is necessary to re-order those experiences, to associate them

with further facts, to set them in a new light, so as to establish a new meaning for the hitherto distressing elements in the patient's mind. The importance Prince attaches to this rôle of meanings in the psychogenesis of disorders, and in psychotherapy, can scarcely be overestimated. The theory of meaning is, as he says, fundamental.¹¹⁰

Leaving aside entirely the sundry conceptions our author has tried and discarded, let us pass now from the historical view of Prince's development to a concluding estimate of the logical and scientific character of his position today.

Worthy of first attention is the fact that Prince's view is not put forward as a finished system. Only a cult could be so represented; and cults are the bane of science. Needs for supplementation of Prince's views have been mentioned; and upon the tentativeness and experimental character of the theory as a whole, he has insisted repeatedly. "Sometimes," as he remarked upon one occasion, "when I think how odd these ideas must sound to a lot of people, I wonder whether I'm not 'off'; but then, when I come back to the cases themselves, I don't see any other way to explain them." Again, editorially, "This *Journal* cannot be said to be lacking in faith in the verity of subconscious processes or in their high degree of mental capacity, but we should like to see every other possible interpretation eliminated by scientific methods." If some more service-

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able interpretation than the present one should be established, "we would rather enjoy recanting." ¹¹¹

Prince's work presents, certainly, a brilliant array of observations (with many, unfortunately, unpublished), which in themselves make an invaluable contribution; a grasp of the complexities of abnormality, which guards well against oversimplification and appeal to occult rubrics; an avoidance of the merely metaphorical or picturesque, but with no shrinking from the unusual, in theoretical formulations; a sense for the steady achievement of workers in allied fields; a corresponding interest in the economy of hypotheses necessary to the integration of abnormal psychology in the general body of the sciences; a goodly organization of working principles, many of them effectively stated; and suggestions very illuminating for the psychology of everyday life.

Especially noteworthy is Prince's integration of abnormal psychology with general psychology. Knowing well that no department of knowledge can afford to retreat from the intellectual enterprises which surround it, that intellectual isolation may favor original development in some cases, but that more often it makes for a weak and distorted development, Prince has successfully avoided such isolation. In making the phenomena of abnormal psychology psychologically comprehensible, he has related the data of his special field to the conceptions

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of general psychology, broadening the latter in a number of important respects. The result, a ready exchange of data and interpretations, is a great advantage to both fields.

His chief contribution, of course, is in his own subject. As a principal factor in establishing abnormal psychology and continuing its development, the work of Morton Prince is of far-reaching significance.

NOTES

The numbers correspond to the superior figures in the text. The references are completed in the Bibliography which follows.

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1. Morton Prince, *The Dissociation of a Personality*. This was written with a view to the seeming impossibility of arousing an interest in such observations as those of Janet, Gurney, and the others. It is said that William James was so interested in the project that he once greeted the author of *The Dissociation* about as follows: "How is your book getting on?" "It is finished and in press." "Oh, I am relieved. I've been afraid if something should happen to you—but it's all right now, it's all right."

However, so effective was *The Dissociation*, at least in holding interest from the author's more fundamental later work, that he has been heard to refer to his heroine, Miss Beauchamp, in terms less endearing than would an ordinary novelist.

2. As Dr. Prince's publications (over a hundred titles, exclusive of more recent articles) have been listed in the Prince commemorative volume, *Problems of Personality*, pp. 420-427, only those to which reference is made in these pages are entered in the Bibliography.

3. W. S. Taylor, *Readings in Abnormal Psychology and Mental Hygiene*, *passim*.

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4. Morton Prince, *The Unconscious*, pp. v, 121-122, 230ff., 535, etc.; and "How a Lesion of the Brain Results in . . . Aphasia," p. 12. This view seems quite incompatible with the fact that in *Psychologies of 1925* we find Prince classified under "Purposive Groups," with McDougall. It is true that certain passages, taken by themselves, give quite an antimechanistic effect; as when the statement is

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made, in so many words, that "we may not be able to say . . . *how* consciousness causes bodily change . . . , but that it does it is beyond dispute." "Why, the whole of criminal law and criminal responsibility is based on 'criminal intent'—the doctrine that consciousness is the cause of bodily actions. It is the seal of criminal responsibility. . . . The Behaviorists may be certain of this: any psychology that does not recognize that consciousness is a cause of our actions, will be treated as nonsense and will never be accepted or seriously considered by common-sense people"; and this whether the psychology be intended as human psychology or as the psychology of animals (*Psychologies of 1925*, pp. 202, 239, 203, 240, 242).

This Cartesian tone dwindles, however, in the light of its author's monistic metaphysical view (*cf.* note 5), and especially in the light of further passages in the same lectures: "Brain processes, that is to say, neural processes, are reflex processes. That we can all agree to. It is the only way in which a neural process can be activated, can function and determine behavior. Reflex processes are by nature mechanistic. There is no doubt about that. But [upon the monistic assumption] neural reflex processes are *ex hypothesi*, the mode in which conscious processes are apprehended through the senses by the methods of the physiologist. . . . Then . . . *that which we call will and purpose, if apprehended objectively through the senses would necessarily be apprehended by these methods as reflex and mechanistic processes . . .* ; and so purposive and mechanistic psychology may be reconciled. . . .

"It would, indeed, be a happy thing, if we could explain behavior in objective terms (brain processes), in view of the uncertainties and fallacies of the data derived by introspection, open as they are to all sorts of interpretations, for we should then be able to use more exact quantitative methods of objective science. But it cannot be done. . . . As we know almost nothing about brain-processes, . . . and as we cannot, therefore, follow a stimulus through its intricate and complex reflex course of complex brain processes until it emerges in motor and other pathways as behavior—in view of all this ignorance we are perforce compelled to explain the causal antecedents of behavior in

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terms of mind, of will and purpose, and not of reflexes" (*Psychologies of 1925*, pp. 219-220).

But in a letter dated May 19, 1927, this term "purpose" is reduced to inherited urge plus acquired foresight, as quoted in the present text, p. 10.

It is, therefore, somewhat puzzling to find Dr. Prince writing, apropos of the foregoing exposition, that "I still hold myself in the Purposive Group. The only difference between me and McDougall is that he places purpose which presupposes foresight (and therefore, it seems to me, experience) in the instinct, and I in acquired dispositions. I do not see what difference it makes where we place the 'purpose.' Purpose seems to me to be contrasted with the mechanistic principle. I do not classify myself with the mechanists, although I tried, as you show in your quotation, to reconcile the two points of view" (Letter, Aug. 15, 1927).

To the expositor it seems clear that for this question it does not differ so much where we place the purpose, as it does differ as to how we conceive it. If purpose is an acquired sort of conditioning, or an acquired "set" or "determining tendency" of the neurons, then "purpose" as an every-day experience can be understood in *mechanistic* neurological or even psychological terms. (This by no means implies necessarily *materialistic* terms. Only metaphysicians who, like the extreme behaviorists, have adopted materialism out of the various and equally unprovable ontologies, espouse materialism; scientists, so long as they remain scientists, espouse descriptivism. Yet because description can occur only in so far as a uniform order of nature exists, all science seems to rest upon the principle of the uniformity of nature, which in practical description is determinism, mechanism.) But if purpose is "to be contrasted with the mechanistic principle," then despite Prince's theoretical reduction of all to a non-material monism, there certainly seems to remain within that system an unpredictable, *élan vital* sort of something which fails to jibe with the generalization that "all neural processes are reflex processes . . . [which] are by nature mechanistic." The present writer, in any event, can only

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quote Dr. Prince's final comment upon this analysis, as follows:

"I can not help thinking that the difficulty in having our minds meet lies in the difference in meaning which terms have for us and in not using the same term always with the same meaning when it is open to different meanings. The mind unconsciously switches from one meaning to another according to the context. Very likely I have been no exception to this habit. The terms 'purpose,' 'mechanistic,' and even 'reflex' are subject to this difficulty, or so it seems to me; they connote different facts in different minds. We ought to settle upon exactly what we mean by them.

" 'Purpose' to my mind stands for a foresight (acquired by experience) of an end or goal (with, perhaps, some content of a wish) plus an impulse or urge or craving (wish?) towards that end which craving (wish?) is not satisfied until the end is attained. 'Mechanistic' properly means pertaining to a 'mechanist' (a philosopher) and, by extension only, to his philosophy. 'Mechanical' is the more precise term and should be the one used. But mechanical has various shades of meaning with different connotations. One meaning is, 'done as if by a machine.'

"To say that the organism as a whole is a machine is absurd, for no machine ever constructed, or that ever will be constructed, can reproduce itself, or can make use of past experience to modify its response to the same stimulus in new situations. And yet the parts of the organism may work mechanically as, for example, the light reflex of the iris, the secretions of glands, the maintenance of equilibrium by the semicircular canals; and many other reflexes. So while the reflexes of the various components of the organism may be mechanical, the functioning of the whole organism as a living thing is not mechanical and only by a figure of speech can be so termed.

"How it can be that the whole is not, while the parts are mechanical is another problem which would carry us too far to consider. We have an analogous problem in the emergence of *living* processes out of chemical and physical—mechanical—forces (atoms). It is 'Emergent Evolution' based probably on complexity of organization and function. Now we have the same principle in brain and

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mental processes which are parts of the whole organism. An individual component of a brain process is 'reflex,' and a chain of such components are reflexes operated by the interaction of physical forces. They are therefore to this point mechanical. But when we reach that amazing intricate complexity of brain processes representing past experience and by which past experience *modifies* and determines different responses to the same stimulus and *adapts them to this same stimulus according to the situation*, it is no longer a machine, the responses cease to be mechanical, for no machine can so adjust, etc. From an objective point of view each component of this complex process is reflex and mechanical, *but* out of this complex process consciousness *emerges* . . . will and purpose (as defined above). This process *is* or becomes consciousness. Hence consciousness determines response just as much as the total reflex components of the complex brain process do.

"This does not mean or require that there is a mental 'entity' or agent, or '*élan vital*' over and above and distinguished from the physical energy of the brain process, any more than there is a 'vital' force, or agent that comes into being in the development of living matter out of organic matter. Quite the contrary. (We must not mix up this question with the old problems of the 'freedom of the will,' 'self-determination,' 'human automatism,' etc. They are different problems. I discussed them years ago in the 'kid's book,' *The Nature of Mind*, etc., 1885, though I have forgotten what I said.)

"That consciousness (past experience, etc.) determines response and adaptation to situations merely means that behavior is determined by the strongest impulses (motives) as evoked by the situation and springing from organized mental systems or dispositions (objective synonym, neurograms). For example, stimulus: I slap you on the back. Response: (1) You laugh, (2) you are angry and strike back, or (3) you are frightened and jump; according to the setting or meaning evoked by the situation. . . . So you see I think I have worked out the problem more completely than have the mechanists, or mechanics, or machinists!

"I don't mean to *defend* my views, but only to explain

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them—if I can—whether right or wrong. I have learned one thing, if only one, namely, no matter how positive I may be (and you may be) I (and you) may be wrong. Indeed the more positive, the more likely to be wrong. The mind is a rotten thing any way as an instrument (shall I say machine?) of precision, and deceives itself" (letter, Aug. 30, 1927).

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5. Morton Prince, *The Unconscious*, pp. 246-247. Cf. also *The Nature of Mind and Human Automatism*; "Hughlings Jackson, etc."; "How a Lesion, etc."; "Professor Strong, etc."; "The Identification of Mind and Matter"; and *Psychologies of 1925*, pp. 212ff. In one place, too, Dr. Prince expresses himself as unable to conceive of purely physiological processes as carrying on, *e.g.*, calculations ("Professor Pierce's Version, etc.," p. 75). Yet this point does not imply a dualism of substance and of laws.

6. Morton Prince, *The Unconscious*, p. 1.

7. *Ibid.*, p. 2.

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8. *Ibid.*, p. 10.

9. *Ibid.*, pp. 131-132, 129. Cf. also p. 122.

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10. *Ibid.*, pp. 120-121 (the first quotation); and "A Contribution to the Study of Hysteria and Hypnosis; . . . a Physiologico-Anatomical Theory, etc.," p. 88 (the second quotation). For the precise phrase, "stimulus and response," Prince has a certain distrust, as liable to convey a too simple picture of the behavior process, through failing to indicate the complexity of the responding organism, especially the complications introduced by accumulated experience, inhibitions, "sets."

11. *The Unconscious*, pp. 121, 122. Cf. also pp. 267, 535. This idea was stated in "Hay Fever, Due to Nervous Influences, Occurring in Five Members of the Same Family," p. 6, as follows: "The symptoms represented an association neurosis, that is to say, by constant repetition, year

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after year from early childhood, the symptoms had become so associated or bound together in a group that they formed a neurosis or sort of nervous mechanism which only required an excitation to set them off, as you might press a button to set working a piece of mechanical mechanism."

12. H. L. Hollingworth, *The Psychology of Functional Neuroses*, pp. 19, 46.

13. Morton Prince, *The Unconscious*, p. 231. Cf. also the section which comes later in the present study, pp. 15-23.

14. William McDougall, *Social Psychology*; *Outline of Psychology*; and *Outline of Abnormal Psychology*.

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15. Morton Prince, *The Unconscious*, pp. 446-447, 530-531. Cf., similarly, *Psychologies of 1925*, p. 226.

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16. *The Unconscious*, pp. 624, 538.

17. *Ibid.*, p. 531. Cf. also "Sexual Psychoses," pp. 894-898.

18. "Miss Beauchamp—The Theory of the Psychogenesis of Multiple Personality," p. 79. Cf. also *The Unconscious*, p. 625; *Psychologies of 1925*, pp. 245, 269; the letter quoted by John T. MacCurdy, *The Psychology of Emotion*, p. 70; and the following comment after a discussion of fear, anger, etc., in Dr. Prince's personal syllabus of *The Unconscious*: "Whatever view be held of other so-called 'instincts' the emotions must be regarded as having that kind of a mechanism which, not being acquired, by definition must be, or may be, termed an instinct, as contrasted with acquired 'dispositions.'"

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19. *The Unconscious*, pp. 451, 448.

20. *Ibid.*, pp. 448, 454, 335.

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21. "The Subconscious Settings of Ideas, etc.," p. 11; and a personal comment on the passage quoted.

22. This conception of *ideas* as dynamic is regarded as

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essential to any dynamic psychology. Indicated in *The Nature of Mind and Human Automatism*, the conception is emphasized in the statement that "it seems to me that this must be so because when viewed from a physiological point of view every nervous process, even a reflex, has a drive of its own. . . . There is a release of energy. There has got to be or else there is no response" ("Memorandum, March 25, 1927"). Recent conversation shows also that "emotion as a reinforcing influence" is clearly regarded as a response situation, in which some such changes as release of hormones, lowering of thresholds, more effective innervation of muscles, etc., must be assumed to occur.

23. "Miss Beauchamp—The Theory of the Psychogenesis of Multiple Personality," p. 135.

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24. "Association Neuroses, etc.," p. 3. Cf. also the citation from "Hay Fever, etc.," in note 11, *supra*, p. 112.

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25. "Association Neuroses, etc.," pp. 7-8; the hay fever case having been quoted from John MacKensie, *Am. J. M. Sc.*, Vol. 91 (1886), p. 45. Cf. also the rest of MacKensie's paper; and Prince, "Association Neuroses, etc."; "Hay Fever, etc."; "Fear Neurosis"; "The Pathology, Genesis and Development of Some of the More Important Symptoms in Traumatic Hysteria and Neuroses as True Functional Diseases"; "Neuroses"; "Traumatic Neuroses," p. 626; "The Educational Treatment of Neuroses, etc."; and "Sexual Perversion or Vice." Of the hay fever induced artificially through hypnosis, Dr. Prince writes (June 13, 1927): "I never published the experiment though often described it in lectures. It was deliciously funny. I explained to the subject in hypnosis that the orchid *Odontoglossum* was sure to cause 'hay fever' if smelt—sort of casual but artful conversation—woke her up, then later presented to her the flower. She smelt it, thanked me, etc. About an hour after, she experienced intense coryza—which disappeared when I explained the joke with a suggestion of relief."

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26. *The Unconscious*, pp. 121-122, 266, 535, 329. Prince, it is true, writes largely of meaning as residing primarily in associated conscious elements which constitute only a more complex experience than that provided by the combination of images with sensations into perceptions (*The Unconscious*, pp. 321-328). But this is an introspective detail, indicative however of the essentially empirical tracing of meaning to its experiential roots.

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27. *The Unconscious*, pp. 311-422.

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28. "Miss Beauchamp—The Theory of the Psychogenesis of Multiple Personality," pp. 83-87, 100-102; *The Unconscious*, pp. 340-352, 170, 388, 23, 53, 350; Wesley Raymond Wells, "Experiments in Waking Hypnosis for Instructional Purposes," pp. 389, 392-404 (reprinted in W. S. Taylor, *Readings*, pp. 531-541); W. S. Taylor, *Readings*, p. 596; and note 48, *infra*, p. 118, with its corresponding text.

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29. Morton Prince, *The Unconscious*, pp. 214-225; and Prince and James J. Putnam, "A Clinical Study of a Case of Phobia: Symposium," p. 259 (Introduction).

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30. *The Unconscious*, pp. 449-469, 265-283, 539, 121, 451, 331-336, 372.

31. *Ibid.*, pp. 283-296; and the section on Personality, *supra*, pp. 21-23.

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32. *The Unconscious*, pp. 266, 231, 472, 481-487, 372, 382-386, 103-106; *The Dissociation*, pp. 539-540, and index; "An Experimental Study of the Mechanism of Hallucinations," pp. 207-208 (reprinted in W. S. Taylor, *Readings*, pp. 567-569); and references in note 48, *infra*, p. 118.

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33. Morton Prince, in *Psychologies of 1925*, pp. 248-253; and "Miss Beauchamp—The Theory of the Psychogenesis of Multiple Personality," p. 135.

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34. *The Unconscious*, p. 549.

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35. Adapted from "Suggestive Repersonalization," pp. 175-176; referring to the case of B.C.A., cited in *The Unconscious*, pp. 545-633, and in "The Psychogenesis of Multiple Personality."

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36. *The Unconscious*, pp. 454-481, 46, 268, 294, 489-492; quoting from p. 475 and from p. 454.

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37. "The Development and Genealogy of the Misses Beauchamp," pp. 469-478; *The Dissociation of a Personality*; *The Unconscious*, where the principle of conflict is explicitly recognized and explained in terms of patterns associated with the instinctive urges (as per note 36, especially pp. 463-467, and adding pp. 90-95, 545-550, 557-561); "Coconscious Images"; and *The Psychology of the Kaiser*, pp. 16-17, 69ff. Cf. also "Miss Beauchamp—The Theory of the Psychogenesis of Multiple Personality," pp. 89ff. (reprinted in W. S. Taylor, *Readings*, pp. 467ff.). The quotation at the end of the paragraph is from *The Unconscious*, p. 548.

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38. *Psychotherapeutics*, p. 27; "The Development and Genealogy of the Misses Beauchamp," p. 481 (from which the quotation is taken); "A Contribution to the Study of Hysteria, etc.," pp. 95-96; "Some of the Present Problems of Abnormal Psychology" (1905), pp. 141-143; and *The Dissociation*, pp. 462ff. Cf. also "Some of the Revelations of Hypnotism, etc."

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39. *The Dissociation*, pp. 456ff., 466, *circa*; "Miss Beauchamp—The Theory of the Psychogenesis of Multiple Personality," pp. 90, 114-117; *The Unconscious*, p. 559; Henry Herbert Goddard, "A Case of Dual Personality," pp. 189, 191; and Boris Sidis and Morton Prince, "A Contribution to the Pathology of Hysteria, etc."

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40. Morton Prince, *The Unconscious*, pp. 548-549, 489-492.

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41. *Ibid.*, pp. 493ff.

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42. Adapted from "Suggestive Repersonalization," pp. 162-164.

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43. *The Unconscious*, pp. 499-502; supplanting the "weakened synthesis" formulation of "Some of the Present Problems of Abnormal Psychology" (1905), pp. 119-120, 124-125, a formulation which, however, was recognized as incomplete (p. 140).

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44. W. L. Northridge, *Modern Theories of the Unconscious*, pp. 5-62; Morton Prince, *The Unconscious*, pp. 250-251n; William James, *Principles of Psychology*, pp. 203-213, 373-400; Frederic W. H. Myers, "Automatic Writing," pp. 3, 4, 12, 22-27, 55, 57; Pierre Janet, "Les actes inconscients, etc."; and Edmund Gurney, "Peculiarities of Certain Post-hypnotic States." For this paragraph the writer is particularly indebted, in many places for the language itself, to Dr. Prince for an outline prepared apropos of the topic.

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45. *J. Abnorm. Psychol.*, Vol. 3 (1908), p. 314.

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46. Morton Prince, *The Unconscious*, pp. 108-129, 230, 91-95, 120 (from which the quotation is taken), p. 134.

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47. *Ibid.*, pp. 120, 247, 229, 266, 149-150. In this way Prince relates the unconscious to the fundamental principles of memory. He points out, indeed, that "*conscious memory is only a particular type of memory*"; *intrinsically*, the activities and linkages of the lower nerve centers are one in kind with those of the higher centers that mediate conscious behavior; and for these higher centers, we assume no great difference of ultimate nature through the mere fact of their being involved in conscious activity. For "there is some evidence that the neurograms of the higher centers may actively function without involving conscious activity (the 'unconscious cerebration' of Carpenter) and in so functioning their activity may show the characteristics of mental processes" (*The Unconscious*, p. 3; and a written comment on the present topic, Oct. 1, 1927).

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48. *The Unconscious*, pp. 150, 341-362, 156-228, 249-264, 374-376, 380, 388, 481-487, 503-504; *The Dissociation*, index; *Psychotherapeutics*, p. 28; "Traumatic Neuroses," p. 619; "Coconscious Images," pp. 310-312; "Experiments to Determine Co-conscious (Subconscious) Ideation"; "A Symposium on the Subconscious," pp. 69, 77; "Some of the Revelations of Hypnotism, etc."; the references under note 28, *supra*, p. 115, etc.

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49. *The Unconscious*, pp. 247, 343, 344, 347, 419; *The Dissociation*, pp. 252-265, 283-286, 294, 532-533; "Coconscious Images," p. 292n⁸; and *The Unconscious*, pp. 256 (which includes the quotation), 545-633.

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50. *The Unconscious*, p. 253, and as per note 49 (superseding *The Dissociation*, pp. 529-530); plus verbal com-

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ment by Dr. Prince. (*The Unconscious* was given that title as the one which would best indicate its contents in view of the discussions current at the time.) Cf., further, "Some of the Present Problems of Abnormal Psychology," pp. 119ff.; *The Unconscious*, pp. 270, 332, 333, 338-345, 360, 363-368, 421-422; and W. S. Taylor, *Readings*, pp. 406-431, 451-458, 537-541, for passages greatly influenced by Prince.

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51. *The Unconscious*, p. 343 (from which the first quotation is taken); "The Actuality and Nature of Subconscious Processes," pp. 130-131 (which includes the second quotation); and a letter to the present writer dated Aug. 16, 1927.

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52. *The Unconscious*, p. 247; "Miss Beauchamp—The Theory of the Psychogenesis of Multiple Personality," p. 135; *Psychologies of 1925*, pp. 264-265; and *The Unconscious*, pp. 288, 636-644.

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53. *The Unconscious*, pp. 541-544, 556ff., 346-348, 570; the syllabus, par. 126; *Psychologies of 1925*, (quoting) p. 237; and "A Symposium on the Subconscious," (quoting) p. 77.

54. *The Unconscious*, (quoting) p. 307; and *The Creed of Deutschtum*, pp. 286-287, 293-299, 311.

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55. "Traumatism as a Cause of Locomotor Ataxia: . . . Alleged Cases"; "The Somewhat Frequent Occurrence of Degenerative Diseases of the Nervous System . . . in Malaria"; "Diseases of the Spinal Cord"; "Idiopathic Internal Hydrocephalus, etc."; "Traumatic Neuroses"; "The Pathology, Genesis and Development of Some of the More Important Symptoms in Traumatic Hysteria and Neurasthenia"; *The Unconscious*, pp. 276, 418-422, 443, etc.; and notes 24ff., *supra*, pp. 114ff.

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56. *The Unconscious*, p. 443.

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57. *Ibid.*, p. 74. Cf., similarly, "Hay Fever, etc."

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58. "Traumatic Neuroses," p. 618. Cf. also "The Subconscious Settings of Ideas"; and *The Unconscious*, p. 337, etc.

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59. *The Unconscious*, pp. 332-333. Cf. also *ibid.*, pp. 270, circa, and 360-367.

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60. *Ibid.*, pp. 333-336, 274-278, 545-633, etc.

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61. *Ibid.*, pp. 467-469.

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62. Notes 34-37, *supra*, p. 116; *The Unconscious*, pp. 272, 504-509, 80, 518; and notes 38-41, *supra*, pp. 116-117.

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63. Morton Prince, *The Unconscious*, pp. 351, 354, 355-362. Cf. also *ibid.*, pp. 363ff., 509ff.; and "Coconscious Images," pp. 307-310 (W. S. Taylor, *Readings*, pp. 592-594).

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64. Morton Prince, *The Unconscious*, pp. 503-504, 510-513; and "Suggestive Repersonalization," p. 165. Cf. also *The Dissociation*, pp. 466-475.

65. Boris Sidis and Morton Prince, "A Contribution to the Pathology of Hysteria, etc."; and Morton Prince, as quoted by John T. MacCurdy, *The Psychology of Emotion*, p. 85. Cf. further Boris Sidis, as reprinted in W. S. Taylor, *Readings*, pp. 435-436.

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66. Morton Prince, *The Unconscious*, pp. 267ff., 442-445, 527; and notes 24, 25, *supra*, p. 114.

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67. Morton Prince, *The Unconscious*, pp. 519-521.

68. *Ibid.*, pp. 514-517, 494-495, 76-77.

69. *Ibid.*, pp. 75-76.

70. *Ibid.*, pp. 33, 280-283, 524.

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71. *Psychotherapy*, p. 28; *The Unconscious*, pp. 351ff., 509ff., 526; and "Coconscious Images," pp. 307-310 (W. S. Taylor, *Readings*, pp. 592-594), etc.

72. Morton Prince, *The Unconscious*, pp. 278, 351ff., 372, 509ff., 526-527.

73. *Ibid.*, p. 373. Cf. *ibid.*, pp. 373-422, for illustrations of these several types.

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74. Morton Prince, *The Unconscious*, pp. 31-32, 504ff.; *The Dissociation*, pp. 474, 460-461 (the first quotation); (the second quotation adapted from) "Suggestive Repersonalization," pp. 161, 171; and "Hysteria from the Point of View of Dissociated Personality." Cf. also John E. Donley, "Neurasthenia from the Point of View of Disintegration of Personality."

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75. Morton Prince, *The Unconscious*, pp. 545ff., 525; "Hysteria from the Point of View of Dissociated Personality" (from which the first quotation is taken); "Some of the Revelations of Hypnotism, etc."; *The Dissociation*, pp. 462-475 (the second quotation); *The Unconscious*, pp. 294, 545; "Miss Beauchamp—The Theory of the Psychogenesis of Multiple Personality"; and *Psychologies of 1925*, pp. 254-259, 261-271.

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76. Cf. the section on Conflict, *supra*, pp. 24-27.

77. *The Dissociation*, pp. 548-550, 539-540; "An Experi-

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mental Study of the Mechanism of Hallucinations," pp. 207-208 (W. S. Taylor, *Readings*, pp. 567-569); "Coconscious Images," p. 312; and "The Pathology, Genesis and Development of . . . Traumatic Hysteria and Neurasthenia," pp. 6-19.

78. Mary Arnold-Forster, *Studies in Dreams*, Foreword, p. xi; Morton Prince, *The Unconscious*, pp. 196-213, 222; *The Dissociation*, pp. 326ff.; and "Coconscious Images."

79. Morton Prince, *The Unconscious*, pp. 200, 202; *The Dissociation*, index: "Visions"; "Coconscious Images"; etc.

80. Morton Prince, *The Unconscious*, pp. 351ff., 509ff.

81. *Ibid.*, pp. 373, 381ff.

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82. *Psychotherapeutics*, pp. 33-34.

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83. Boris Sidis and Morton Prince, assisted by H. Linenthal, "A Contribution to the Pathology of Hysteria, etc.," section on Treatment.

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84. Morton Prince, *The Unconscious*, pp. 515, 366-368, 385-386; W. S. Taylor, *Readings*, pp. 591-594; Pierre Janet, *The Mental State of Hystericals*, pp. 284-285, 325, 410-412; Joseph Breuer and S. Freud, as cited by Sigmund Freud in his lecture, "The Origin and Development of Psychoanalysis"; and Morton Prince, *The Unconscious*, pp. 321ff.

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85. "Association Neuroses, etc.," last sentence (the first quotation in the present paragraph); "The Educational Treatment of Neurasthenia, etc.," pp. 12-13 (the second quotation), 16, 18; *Psychotherapeutics*, p. 45 (which includes the third quotation); "Hay Fever, etc."; "Fear Neurosis"; "Sexual Perversion or Vice, etc.," last page; "The Subconscious Settings of Ideas," p. 18; "Coconscious Images"; "Miss Beauchamp—The Theory of the

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Psychogenesis of Multiple Personality"; *The Dissociation*; and *The Unconscious*.

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86. Morton Prince, *The Unconscious*, p. 416.

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87. Adapted from W. S. Taylor, *Readings*, pp. 690-695; including Morton Prince, an abstract from *The Unconscious*, pp. 389-410, and his typed syllabus of that work, par. 79. Cf. also the references listed in *Readings*, pp. 690-695; the passages in *The Unconscious*, pp. 401n, 405, 420; and *Psychotherapeutics*, pp. 43-44, 40.

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88. Morton Prince, *The Unconscious*, pp. 414-415, 418.

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89. The syllabus, par. 39; and Morton Prince and James J. Putnam, "A Clinical Study of a Case of Phobia: Symposium," p. 259.

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90. W. S. Taylor, *Readings*, pp. 492-500, 512-542, 697-723; Floyd Henry Allport, *Social Psychology*, pp. 242ff.; Morton Prince, syllabus, par. 196-201, amplified by discussion; Sigmund Freud, *Beyond the Pleasure Principle*, and earlier writings; Morton Prince, *The Unconscious*, p. 31, etc.; and "Suggestive Repersonalization," pp. 170-171.

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91. Morton Prince, syllabus, par. 202-205; *The Unconscious*, pp. 303, 506, 632, and similar passages in *The Dissociation*; *The Unconscious*, pp. 31, 37-38, 75, etc.; *ibid.*, pp. 24-27; and Wesley Raymond Wells, "Experiments in Waking Hypnosis, etc." (W. S. Taylor, *Readings*, pp. 531-541).

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92. Morton Prince, "Suggestive Repersonalization," pp.

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179, 159, 180. Cf. also *ibid.*, 160, 164, etc.; and William James, *Principles of Psychology*, Vol. 1, pp. 203, 385.

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93. Morton Prince, "Suggestive Repersonalization," p. 172; correspondence dated Aug. 23, 1927; and "The Educational Treatment of Neurasthenia and Certain Hysterical States," p. 15.

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94. The syllabus, par. 196-198; and many published passages.

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95. *Psychotherapeutics*, p. 35. Cf., too, *The Unconscious*, pp. 289-290, 368-372.

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96. *Psychotherapeutics*, pp. 35, 37, 40. Cf., likewise, *The Unconscious*, p. 304.

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97. Morton Prince, "Miss Beauchamp—The Theory of the Psychogenesis of Multiple Personality," p. 135; and many other places. References really corroborative of this general position are K. S. Lashley, "Physiological Analysis of the Libido"; and James L. Mursell, "The Logic of Sublimation: A Criticism."

98. *Psychotherapeutics*, p. 36.

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99. A letter, Oct. 11, 1927; and W. S. Taylor, *Readings*, pp. 114-117, 149n²-153n, 163, 670-679, 703, 712, 746-748, 752-753.

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100. Prince's letter, Oct. 11, 1927; the syllabus, par. 26; *The Unconscious*, pp. 332, 600; *The Psychology of the Kaiser*, the end of Chap. i, Chaps. vii-ix; W. S. Taylor, *Readings*, pp. 120-121, 161, 277-279, 288ff.; and Alfred Adler, *Individual Psychology*, pp. 318-320, etc., and A

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Study of Organ Inferiority and Its Psychical Compensation.

101. Morton Prince, *The Dissociation; The Unconscious*; "Suggestive Repersonalization," pp. 162, 165; etc.

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102. W. S. Taylor, *Readings*, pp. 251-252, 127-133, 484-491, 628-629, 724.

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103. Fritz Wittels, *Sigmund Freud*, p. 30, etc.; W. S. Taylor, *Readings*, p. 113n; Morton Prince, "Association Neuroses"; "Some of the Revelations of Hypnotism, etc."; and conversations with Dr. Prince.

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104. "The Need of Including Systematic Instruction in Functional Diseases in the Medical Schools" (the quotation); and a letter dated June 25, 1927.

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105. William James's article appeared in the *Proc. Am. Soc. Psych. Research*, Vol. 1 (1889), p. 548. These paragraphs also draw upon Prince's letter of June 25, 1927.

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106. Boris Sidis and Morton Prince, "A Contribution to the Pathology of Hysteria"; Morton Prince, "Some of the Present Problems of Abnormal Psychology," pp. 118, 140; *The Unconscious*, pp. 43, 45, 69, 71, 81, 196, 203, 221, 225, 390n, 392-393n, 509, 513, 582; "Miss Beauchamp—The Theory of the Psychogenesis of Multiple Personality," p. 93; the syllabus, par. 138ff.; and "The Subconscious Settings of Ideas, etc.," p. 9, (quoting) 10, 16. Cf. also "A Critique of Psychoanalysis."

107. Letter, May 19, 1927.

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108. *Ibid.*, referring to *The Dissociation*.

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109. *The Unconscious*, p. 467; "Sexual Perversion or Vice? etc"; "Sexual Psychoses"; the syllabus, par. 148, (quoting) 150-155; and "Suggestive Repersonalization," p. 165.

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110. Letter, Oct. 11, 1927. Cf., for Prince's views on meaning, *supra*, pp. 17-23, 24, 42, 46, 47, 49-53, 55, 56, 58, 60, 70-72 and 77-79.

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